SEP New Projects Unit
Water Quality and Temperature
Data Collected 1979-1984

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ABSTRACT

MacKinlay, D.D. 1984 SEP New Projects Unit Water Quality Data Collected 1979-1984. Can. Data Rep. Fish. Aquat. Sci. 409: iv + 190 p.

This report provides summary tables of water quality analysis and temperature monitoring results from sampling undertaken by the New Projects Unit of the Salmonid Enhancement Program during biological reconnaissance of streams and potential hatchery sites throughout British Columbia and the Yukon.

Key words: water quality, water temperature, reconnaissance, hatchery sites.

Résumé

MacKinlay, D.D. 1984 SEP New Projects Unit Water Quality Data Collected 1979-1984. Can. Data Rep. Fish. Aquat. Sci. 409: iv + 190 p.

On présente des tableaux sommaires des résultats de l'analyse de la qualité et de la température de l'eau obtenus à partir des échantillons d'eau recueillis par l'unité des nouveaux projets du Programme de mise en valeur des salmonidés, au cours de l'étude biologique des cours d'eau et des sites potentiels de pisciculture par toute la région du Pacifique.

Mots-clés: qualité de l'eau, température de l'eau, étude, sites de pisciculture

INTRODUCTION

PURPOSE

Since its inception in 1979, the New Projects Unit of the Facilities Operations Division of the Salmonid Enhancement Program (SEP) has provided biological input to the development of major salmonid enhancement projects in the Pacific Region. The Unit's responsibilities include general area reconnaissance, detailed site reconnaissance, enhancement and operational strategy selection, conceptual design and review and consultation during detailed engineering design and construction of facilities. An essential part of the reconnaissance duties is the determination of the suitability of potential hatchery source waters for fish culture. The Unit has therefore collected directly or by contract a large number of water samples from locations throughout the region and had them analyzed for parameters of interest to fish culture. The Unit has also placed thermographs at several locations to determine the temperature profiles of aquifers and streams with potential as source or receiving waters for facilities.

The purpose of this manuscript is to consolidate the bulk of the data collected up to July, 1984 to provide wider access to it. Since the reconnaissance is ongoing, this report is not a final report on New Projects sampling.

SOURCES OF DATA

Although water quality data collected by other groups such as the Federal Environmental Protection Service (EPS) or the Provincial Water Studies Branch are often used in the evaluation of potential source waters for hatchery use, this report presents data collected specifically by New Projects staff or for the New Projects Unit by private firms under contract to New Projects to carry out bio-baseline research or water quality monitoring of pump tests of new wells, or by members of other SEP groups under guidelines given by New Projects.

Water temperature data was mostly collected by New Projects Unit staff but some data comes from records received from other agencies (e.g., B.C. Pollution Control Branch for Savona; International Pacific Salmon Fisheries Commission for Adams) or from thermograph charts obtained from other Department of Fisheries and Oceans (DFO) groups.

METHODS

WATER QUALITY SAMPLE COLLECTION

Normally, each sampling invcived the filling of three plastic bottles with water (as per guidelines in EPS/DFO, 1982) to be analyzed by the EPS/DFO lab for a series of parameters of relevance to fish culture (Table 1). A 2 L bottle was rinsed three times, then used to fill two 100 mL or 200 mL bottles. The first small bottle contained concentrated nitric acid (HNO_3) preservative which helped to keep dissolved metals in solution so that they would not be absorbed into the plastic walls of the container. The acid was added at a rate of 5 mL/L. The second small bottle contained concentrated nitric dichromate (14 g of $K_2Cr_2O_7$ in 1 L of concentrated HNO_3, added at a rate of 50 mL/L) which served as a preservative for analysis of mercury. The 2 L bottle was then refilled for nutrients and residues analysis. The bottles were tightly capped, labelled "Metals", "Mercury" and "Nutrients/NFR" respectively and kept in a cooler on ice until delivery to the lab. Samples were routinely delivered within 48 hr of having been taken, to minimize biological and chemical changes in the chemical species present.

Samples were taken from running water, standing water and wells. Running water samples include those from springs, streams and rivers. An attempt was made to minimize shore effect in streams by taking samples mid-stream and below the surface, with some depth integration. This normally was accomplished by wading to the center of the stream and lowering the bottle to arms length through the water column as it was filling. Where mid-stream sampling was not possible due to the depth or velocity of the water-course, a reasonable attempt was made to collect the sample as near mid-stream as possible by reaching from overhanging trees, lowering the bottle from a bridge, climbing on floating logs or rock outcrops or wading as far out as was safe.

Table 1. Laboratory Analysis Techniques used for Water Quality Parameters. (EPS/DFO, 1979)

Parameter Name	Table Abbreviation	Analysis Technique	Reported Units	Normal Precision	Detection Limit
Alkalinity - total	ALK.TOT	Potentiometric titration	mg/L as $CaCO_3$	± 1.0	> 1.0
Ammonia - total	AMMON.	Phenolhypochlorite Colorimetric	mg/L N	± 1%	> 0.005
Chloride	CHLOR	Thiocyanate - Combined Reagent	mg/L	± 0.1 mg/L	> 0.5
Color	COLOR	Tristimulus	Color units	± 5 units	> 1.0
Conductivity	COND.LAB	Conductivity Cell	umbos/cm	± 3%	0
Hardness	HARDNESS	AAS (see footnote, next page)	mg/L as $CaCO_3$	± 5%	> 0.03
Nitrite	NITRITE	Diazonization - Colorimetric	mg/L N	± 0.8%	> 0.005
Nitrate	NITRATE	Cadmium - Copper Reduction	mg/L N	± 2.3%	> 0.01
Hydrogen ion	PH	Potentiometric	pH units	± 1.9%	0
Phosphate - total	PHOSPH	Acid-Persulfate - Autoclave Digestion	mg/L P	± 0	> 0.005
Total Residue	RESID.TOT	Evaporation	mg/L	± 5%	> 5.0
Filtrable Residue	RESID.FIL	Filtration, Evaporation	mg/L	± 10%	> 5.0
Non-Filtrable Residue	RESID.N.F.	Filtration, Drying	mg/L	± 10%	> 5.0
Salinity	SALIN	Refractive Index	$^{o}/_{oo}$ (ppt)	± 0.05	> 1.0
Silica	SILICA	Ascorbic Acid Reduction	mg/L	± 0.04	> 0.5
Sulfate	SULFATE	Barium Chloranilate	mg/L	± 0.5	> 1.0
Total Dissolved Solids	T.D.SOL	Filtration, Evaporation	mg/L	± 10%	> 5.0
Turbidity	TURBID	Nephelometric	Formazin (FTU)	N/A	> 1.0
Metals:*					
Aluminum	AL	ICAP	mg/L		> 0.09
Arsenic	AS	ICAP	mg/L		> 0.05
Barium	BA	ICAP	mg/L		> 0.001
Calcium	CA	ICAP	mg/L		
Cadmium	CD	AAS	mg/L		> 0.001
Cobalt	CO	ICAP	mg/L		> 0.005
Chromium	CR	ICAP	mg/L		> 0.005
Copper	CU	AAS	mg/L		>0.001

Table 1. cont'd

Parameter Name	Table Abbreviation	Analysis Technique	Reported Units	Normal Precision	Detection Limit
Iron	FE	ICAP	mg/L		
Mercury	HG	AAS	mg/L		> 0.0002
Potassium	K	ICAP	mg/L		
Magnesium	MG	ICAP	mg/L		
Manganese	MN	ICAP	mg/L		
Molybdenum	MO	ICAP	mg/L		> 0.005
Sodium	NA	ICAP	mg/L		
Nickel	NI	ICAP	mg/L		> 0.02
Phosphorus	P	ICAP	mg/L		> 0.05
Lead	PB	AAS	mg/L		> 0.001
Antimony	SB	ICAP	mg/L		> 0.05
Selenium	SE	ICAP	mg/L		> 0.05
Silicon	SI	ICAP	mg/L		
Tin	SN	ICAP	mg/L		> 0.1
Strontium	SR	ICAP	mg/L		
Titanium	TI	ICAP	mg/L		> 0.002
Vanadium	V	ICAP	mg/L		> 0.01
Zinc	ZN	AAS	mg/L		> 0.001

* All metals were analysed using Atomic Emission Spectophotometry (AES) using an Inductively Coupled Argon Plasma (ICAP) excitation source coupled to a computer controlled Optical Emission Spectrometer (OES). In addition, increased sensitivity analysis was carried out for toxic heavy metals (Cd, Cu, Hg, Pb, Zn) using flameless Atomic Absorption Spectrophotometry (AAS). The more sensitive value is reported in the tables.

Standing water samples include those from lakes, swamps, beaver ponds and pools. Surface samples were taken similarly to running water samples, with an attempt to sample from the middle of the water body with some depth integration. For lake profiles, separate samples were taken at different selected depths using a Van Dorn sample bottle activated by a messenger weight. A Van Dorn sampler of at least 5 L capacity was used to allow for rinsing the 2 L plastic bottle before filling it.

Well samples were collected in three ways. First, during pump tests of newly developed wells (where the groundwater hydrologist has the well pumped at a high rate to get an estimate of the potential yield), arrangements were made with the pump test crew to tap the pumped water line to obtain a small flow of unaerated water, fresh from the well. A tap was normally placed as near as possible to the wellhead to minimize the possible contamination of the water by materials in the discharge pipeline. Second, where a developed well was to be sampled without the assistance of a pump test contractor, a 1/4 hp electric submersible pump (powered by a 4 hp, 1500 W portable alternator) was lowered by rope into the well to a few meters below the static water level. Discharge was through 45 m of 50 mm diameter PVC LAYFLAT® flexible hose in 7.5 m sections with fire hose connectors at each end. Discharge flow at a head of 23 m was about 40 LPM. The pump was left to run for at least 2 to 3 hours to remove standing water in the well before samples were taken. Third, wells which had pumps and supply lines hooked up to them were sampled from the water port closest to the source, after running it for as long as feasible to help clear out possible contaminants from the pump and pipeline.

WATER QUALITY SAMPLE ANALYSIS

Samples from the three bottles were analyzed in detail at the EPS-DFO Water Quality Laboratory at Cypress Creek in West Vancouver using prescribed methods (EPS/DFO, 1979, mostly based on Greenberg, et al., 1981). These are summarized in Table 1. The following parameters can change value very quickly after sample collection and were normally measured at the sample collection site:

pH: Most well samples were measured with a pH meter calibrated with buffer solutions, (accuracy ± 0.1 pH units) whereas most surface samples were measured with HACH® comparator kits (wide range, brom cresol or phenol red reagents with an accuracy of ± 0.2 - 1.0 pH units). Well sample values are therefore usually more accurate.

Temperature: Calibrated mercury thermometers of various sizes and qualities were used (accuracy ± 0.05 - 0.5 °C). On occasion, thermister probes on meters were used, with calibration by an ASTM calibrated reference thermometer.

Dissolved Oxygen (DO): Well samples were normally measured with dissolved oxygen meters of various makes and accuracies and surface waters with HACH® field DO kits (modified Winkler titration using powder packets for reagents). Some samples were analyzed by the standard modified Winkler titration method (Greenberg et al., 1981). Glass sample bottles or probes were immersed in an undisturbed, flowing stream of sample water to get a representative reading of oxygen content.

Dissolved Gas Pressure: Novatech® tensiometers Model 300B (accuracy ± 7mm Hg) were used to measure the difference in partial pressure between the total gases in solution in the sampled water and the saturation value at local atmospheric pressure. Since gas pressure can change very rapidly with splashing, air entrainment or mixing, special care was taken to ensure that undisturbed water was analyzed. The tensiometer probe was zeroed to local barometric pressure then placed in a gently flowing stream of sample water and left to equilibrate (generally 20 - 30 min.). Effects of rapid change in temperature and bubble formation on the probe's semi-permeable tubing (which could lead to inaccurate readings) were minimized by long equilibration and periodic, gentle shaking of the probe.

At the same time as the tensiometer readings were taken, dissolved oxygen concentration, water temperature and local barometric pressure (using an aneroid barometer or calling the local airport for an altimeter reading) were recorded. Nitrogen and argon pressure was calculated from these parameters according to the following formula:

$$\%\ \text{Sat } N_2 \text{ \& Ar} = \frac{(PAtm + Pt) - \frac{O_2}{BO_2}(0.532) - PH_2O}{(PAtm - PH_2O) \times 0.7902} \times 100$$

where PAtm = local atmospheric pressure in mmHg
Pt = tensiometer reading in mmHg
PH_2O = partial pressure of water vapour in mmHg
BO_2 = Bunsen Coefficient for oxygen
O_2 = dissolved oxygen concentration in mg/L

WATER QUALITY TABLE LAYOUT

The water quality tables are printouts from computer files stored in the VisiCalc® commercial software spreadsheet format on "5 1/4 inch" floppy diskettes accessed through the Apple II microcomputer. VisiCalc®, although not really suitable to storage of large data banks, is very easy to use in storing and manipulating small, one-page data sets. Apple Plot®, VisiPlot®, Apple Business Graphics® or other commercial software plotting programs can be used to plot changes in parameter values from a series of samples, without the operator having to learn any computer programming. Detailed descriptions of VisiCalc® functions are found in Fylstra and King (1981).

Parameters in the tables are subdivided into two sections, non metals preceding metals, each arranged in alphabetic order for easy reference. Due to the column width restriction in VisiCalc®, many of the parameter labels are abbreviated names. Full and abbreviated names are shown in Table 1. Metals are listed by international element symbols (eg. iron = Fe, mercury = Hg).

Criteria values for each parameter are listed in each table. The values for TOXIC and

RECOMMENDED are taken from the literature, mostly from EPA (1976) and Thurston, et al. (1979). A more recent update of parameter values of importance to fish culture is given in SIGMA (1983). These values are only considered very rough guides to help point out potential problem areas and do not constitute "hard and fast" rules in the selection of acceptable hatchery water supplies.

WATER TEMPERATURE DATA COLLECTION

Most of the water temperature data was collected using Peabody Ryan Model "J" Thermographs. These instruments are capable of operating for three or six months (models J-90 or J-180, respectively) unattended, powered by a single "C" cell battery. Models with a chart span of 0°C to 30°C were used. The dark green colour option was chosen to help hide the machines from passersby when placed in the field. A small dark sign with the following message was glued to each machine.

> "ATTENTION!"
> This Temperature Recorder is collecting info. to be used for planning a salmon hatchery in this area.
> PLEASE RETURN TO WATER WHERE FOUND. IF FOUND UNATTACHED, CALL COLLECT.
> Bruce Shepherd 666-1115
> THANK YOU FOR HELPING.

This was an attempt to reduce loss of data and machines through ignorant vandalism and to encourage return of machines which had broken loose from their moorings. One machine was in fact returned after being found in the Fraser River, over 100 km downstream from where it had been placed.

In the field, the thermographs were concealed as much as possible by hiding them in pools under root nodes, overhanging trees, rock outcrops, log jams, etc. They were normally moored to the nearest tree on shore with green or black seine twine or, in more exposed locations, 1/8 inch steel cable. For some wells, lockable caps were custom fabricated to fit over the top of the casing. A small eye bolt was welded to the inside of the cap to allow attachment of the twine leading to the thermograph.

At the end of each reading period the battery and recording tape were changed. Machine calibration was checked by measuring the water temperature with a pocket or other thermometer. Special care was taken to keep the sealing gasket and clamp clean to ensure that the inside of the machine stayed as dry as possible, to avoid damage to the electronics by exposure to moisture.

WATER TEMPERATURE DATA ANALYSIS AND PRESENTATION

Data from the thermograph tapes or other data source with daily temperature records were stored in a numeric data file on APPLE II floppy diskettes accessed through microcomputers using the "Enter Water Temperature" program described in Mackinlay (MS 1985). Other programs were developed to manipulate the data on file or print them out in tabular or graphical form. The data are presented in this report in the forms of a monthly summary and a plot of temperature versus date for each location and year. Tables and plots are presented by site name, in alphabetical order.

RESULTS

AREAS COVERED

Refer to Figure 1 for the general locations of the sample sites in B.C. (the Whitehorse site is not shown). Sampling was concentrated in the main tributaries of the Fraser River from the Thompson River upstream, Knight Inlet, Kitimat Arm and Gardner Canal. Outside of these areas, samples were taken at proposed hatchery sites on the Chehalis, Cheakamus (Tenderfoot Creek), Indian, Kitsumkalum (Dry and Clear Creeks), Nitinat and Yukon (Whitehorse Rapids) River systems.

SAMPLING TIMING

The timing of water quality sampling for most of the sites is summarized in Table 2. Samples from all years are superimposed to show at which times of year samples for each site have

FIGURE Sample site locations.

1. Chilko
2. lower Fraser
3. middle Fraser
4. upper Fraser
5. Gardner Canal
6. Indian Arm
7. Kitimat Arm
8. Knight Inlet
9. lower Skeena
10. Squamish
11. Thompson
12. North Thompson
13. South Thompson
14. Thompson Sound

been taken. The type of data obtained is either for water quality (WQ) or water temperature (WT).

Each month on the table is split up into four weeks such that a dash in the first column for WT indicates that a recorder was operating during the first week of January in one or more years. A star in the 10th column for WQ indicates that at least one water quality sample was taken sometime during the second week of March. The weeks were split by date (1st week = day 1 to 7, 2nd = 8 to 15, 3rd = 16 to 23, 4th = 24 to end).

SAMPLE SITE DESCRIPTIONS

Since the number of sites is large, the following descriptions are very brief and are meant to give someone with local knowledge an idea of where the samples were taken, rather than giving complete descriptions of the area or directions to the site. River locations can be found in the British Columbia Recreational Atlas (Min. Rec. Cons., 1978) or the Gazetteer of Canada: British Columbia (CPCGN, 1966). Along with each stream are shown its location according to the Gazetteer (nearest latitude and longitude of month, with a quadrant descriptor), and its watershed code, supplied by the B.C. Aquatic Studies Branch (Shera and Grant, 1980).

1. Adams River (South Thompson) (50°; 119°; NW) (03-1800) - sampled at the mouth in 1981; at the "Salute to the Sockeye" display site in 1982; and just upstream of Gold (Nikwikwial) Creek in 1982 and 1983. The well is at the "Salute to the Sockeye" site. Temperature for the lower Adams River is from International Pacific Salmon Fisheries Commission data.

2. Ahnuhati River (Knight Inlet) (50°; 125°; NW) (90-5500) - sampled at the mouth, above tidal influence.

3. Barriere River (North Thompson) (51°; 120°; SE) (04-0700) - sampled at the Highway #5 bridge in the town of Barriere.

4. Bayliff - see Chilko

5. Bessette Creek (South Thompson) (50°; 118°; SW) (03-5400-350) - sampled near the Highway #6 bridge near Lumby.

6. Bish Creek (Kitimat Arm) (53°; 128°; NW) (91-9100) - sampled at the mouth, above tidal influence.

7. Blackwater (West Road) River (middle Fraser) (53°; 122°; SW) (07-0000) - the river samples were taken at two trap sites near the confluences with the Euchiniko and Nazko Rivers. Springs are small groundwater outflows near the river at different locations.

8. Blue River (North Thompson) (52°; 119°; SE) (04-6000) - sampled at the gravel road bridge near the mouth.

9. Bowron River (upper Fraser) (54°; 121°; SW) (00-6300) - lower springs and well samples were taken at various places within a swamp/meadow on the left bank of the river across from the mouth of Grizzly Creek. River samples taken during the 1980 consultant study were at the Highway #16 bridge near the mouth. Upper springs refer to a series of groundwater fed beaver ponds adjacent to Antler Creek just north of the Bowron Lake community.

10. Cecil Creek (Kitimat Valley) (54°; 128°; SW) (91-9000) - sampled at the first logging road bridge near the mouth.

11. Cheakamus River (Squamish) see Tenderfoot.

12. Chehalis River (lower Fraser) (49°; 123°; SW) (01-0400) - some samples were taken at the hatchery intake site on the right bank between the canyon and the Morris Valley Road bridge and some samples were taken about 100 m downstream from the bridge on the left (east) bank. Wells are on the Chehalis Hatchery site.

13. Chilcotin (Middle Fraser) (51°; 122°; NE) (05-0000) - The Chilcotin was

Table 2. Summary of Sample Timings

	Type	Jan.1	Feb.1	Mar.1	Apr.1	May 1	Jun.1	Jul.1	Aug.1	Sep.1	Oct.1	Nov.1	Dec.1
ADAMS													
- River	WT	----------											
	WQ		*		*		*	*	*	*	*	*	
- Well	WQ								*				
- Gold(Nikwikiai)	WQ		*						*				
AHNUHATI RIVER	WQ									*			
BARRIERE RIVER	WQ					*	*	*	*				
BESSETTE CREEK	WQ								*				
BISH CREEK	WQ				*		*	*	*				
BLACKWATER													
- Upper River	WQ					*			*				
- Lower River	WQ								*				
- Middle Spring	WT					----------							
- Lower Spring	WT								--------				
BLUE RIVER	WQ								*	*	*	*	
BOWRON													
- River	WQ									*		*	
- Lower Springs	WT												------
	WQ			*	*			*					
- Upper Springs	WT	----------				----------							
	WQ				*	*		*	**		*	**	
- Well	WQ											**	
CECIL CREEK	WQ				*	*							
CHEHALIS													
- River	WT						----------						
	WQ		*		*		*		*				
- Wells	WQ		*		*		*						
CHILCOTIN													
- River	WQ							*		*			
- Puntzi Well	WT	------					----------						
	WQ		*				*			*			
CHILKO													
- River	WQ									*			
- Bayliff Spring	WT	-----	----------				----------						
	WQ		*				*			*	*		
- Withrow Creek	WQ		*										
CHRISTIAN													
- Creek/Springs	WQ			*									**
- Well#1	WQ												**
- Well#2	WQ			*	*								
CLEAR CREEK	WT	--------			----------					----------			
	WQ	*	*		**	*		**		*			**
CLEARWATER													
- River	WQ					*	*	*	*				*
- Wells	WT		----------										
	WQ												**
- Mike's Well	WT	----------											
	WQ		**			*				*		*	

Table 2 continued

	Type	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	Jun. 1	Jul. 1	Aug. 1	Sep. 1	Oct. 1	Nov. 1	Dec. 1
CRAZY CREEK	WT	---	---		---	---		---		---	---		
	WQ			*	*			**	*	*	*		*
DALA RIVER	WQ			*	*	*	*	**					
DEVEREUX													
- Creek	WT	---	---	---	---	---	---	---	---	---	---	---	---
	WQ		*							*	*		
- High Lake	WT	---	---	---	---	---	---	---	---	---	---	---	---
	WQ		*										
DRY CREEK													
- Upper Spring	WT	---	---		---	---		---	---	---	---	---	---
	WQ	*	*		**	*		**		*			**
- Lower Spring	WQ		*		*	*		*		*			
- at Road	WQ	*	*		*	*		*					*
DUTCH													
- Lake	WQ		*			*							*
- Resort Well	WT	---	---	---	---	---	---	---	---	---	---	---	---
	WQ		**			*				*		*	
EAGLE													
- River	WQ			*		*	*	*		*	*	*	
- Well #1	WT	---	---	---		---	---	---				---	---
	WQ			*					*				
- Well #2	WQ				*	**							
FINN													
- Creek	WT	---	---		---	---	---	---	---	---	---	---	---
	WQ				****	**	***	*	**		*	*	*
- Well #1	WT	---			---	---	---	---	---	---	---	---	---
	WQ				*								
- Well #2	WT	---	---	---	---	---	---	---	---	---	---	---	---
	WQ				****					*		*	
HIRSCH CREEK	WQ				*****	***	**	*	**				
HOLMES RIVER	WQ				*	***	*	*		*		*	
HORSEFLY RIVER	WQ								*		*	*	
INDIAN													
- River	WT							---	---	---			
	WQ		*			**		*	*	*	*	*	***
- Wells	WQ		*			**		*		*	*	*	***
- Forestry Creek	WQ							*					
JONES CREEK	WT						---	---	---	---			
JOSEPH CREEK	WQ					*	*	*	*				
KAKWEIKEN RIVER	WQ								*	**		*	
KEMANO													
- River	WT	---	---	---	---	---	---	---	---	---	---	---	---
	WQ								*	*	*		*
- Wells	WQ												***
- Horetsky Cr.	WQ								*	*	*		*
- Seekwakin Cr.	WQ												*
KILDALA RIVER	WQ			*	*	*	*	* *					

Table 2 continued

	Type	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
		1	1	1	1	1	1	1	1	1	1	1	1
KITIMAT													
- River	WT	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------
	WQ				*****	**	**	*	**				
- Well 78-5	WQ					*		*					
- Well 79-1	WT				----------	----------							
	WQ				********	**			*		**		
- Well 80-1	WQ								*	*			
- Well 84-1	WQ				*								
- Eurocan	WQ	*		*	*							*	
KITLOPE													
- River	WQ								*	*	*		
- Tsaytis River	WQ										*		
- Tezwa River	WQ								*	*	*		
- Kalitan Creek	WQ										*		
KOWESAS RIVER	WQ								*	*	*		
KWALATE RIVER	WQ									*			
LEMIEUX CREEK	WQ					*	*	*	*				
LION CREEK	WQ								*	*	*	*	
MAHOOD													
- River	WT						------						
	WQ		*		*	*		*			*	*	
- Well	WT	------				----------	----------	----------	----------	----------	----------	----------	----------
	WQ		*		*			*			*	*	
MORKILL RIVER	WQ				*	*	*	*			*	*	
NECHAKO													
- River	WQ										**		
- Wells	WQ			**							*		*
NICOLA													
- River	WQ		*	*					*				
- Rearing Pond	WT	----------	----------	----------									------
- Pond Intake	WT		----------	----------	----------	----------	----------	----------			----------	----------	----------
NITINAT													
- River	WQ			*	*	*	*	*					
- Wells	WQ					*	**						*
- Little Nitinat	WQ			*	*	*	*	*					
NORTH THOMPSON R.	WQ					*	*	*	*	*	*		
PERRY RIVER	WQ							*	*	*	*		
QUESNEL													
- River	WQ				*	*	*	*	*	*	**	*	
- Wells	WT	----------	----------	----------	----------								--
	WQ				**							*	
RAFT RIVER	WQ				*	*	*	*	**	**	*	*	
RANKIN CREEK	WT	----------	----------	----------	----------	----------						----------	
	WQ					*		*	*				
SALMON RIVER	WT								----------	----------			
	WQ				*		*	*	*	**	*	*	
SAVONA	WT	----				----------	----------	----------	----------	----------	----------	----------	----------
	WQ						*				*		

Table 2 continued

	Type	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
		1	1	1	1	1	1	1	1	1	1	1	1
SEYMOUR													
- River	WQ								* *	*	*		
- McNomee Creek	WQ									*	*		
- Ratchford Creek	WQ								* *	*	*		
SHUSWAP													
- River	WT	----------										----------	
	WQ		*	***								*	
- Well 4	WQ			*									
- Well 5	WQ			*									
	WT						----------						
- Well 6	WQ			*									
- Well 8	WQ			*									
- Well 9	WQ			*									
SLIM CREEK	WQ				* * * *	*				**	*		
SOUTH PASS CREEK	WQ								* *	*	*		
SOUTH THOMPSON R.	WQ				*	*	*		* *	*	*		
SPIUS													
- Creek	WQ		*	*	*				*			*	
- Well A	WT												
	WQ		*	**									
- Well C	WQ				*								
STAVE RIVER	WT	----------				----------				----------		----------	
STUART													
- River	WQ				*	*	*			*	*		
- Well	WT	----------					----------					----------	
	WQ				*		*						
SWIFT CREEK	WT	----------									----------		
TAPPEN CREEK	WQ								* *	*	*		
TASEKO SPRINGS	WT	---	----------					----------		----------			
	WQ		*							*	*		
TENDERFOOT													
- Creek	WQ				**								
- Wells	WQ				**							*	
- Cheakamus River	WQ											*	
TETE JAUNE CACHE	WQ									*			
TOM BROWNE													
- River	WT		----------										
- Lake	WQ	*	* *			*		*	*			*	
- Glendale River	WQ	*								*			
TORPY RIVER	WQ				* * * *		*			*	*		
TRINITY CREEK	WQ								* *	*	*		
WHITEHORSE WELLS	WQ						*						
WILLOW RIVER	WQ				*	*	** *		*		*		

sampled where it supplies an irrigation canal on the Bayliff property near the confluence with the Chilko. The Puntzi well is a small artesian well located at the B.C. Forest Service Puntzi Airstrip near Chilanko Forks. Samples were taken across the road in the well overflow stream.

14. Chilko River (Middle Fraser) (52°; 123°; SE) (05-3835) - The Bayliff springs are a series of groundwater fed beaver ponds located on the Bayliff family property between the Chilco and Chilcotin Rivers at their confluence. The Chilko River was sampled just upstream of the seep outflow. Withrow Creek (05-1620) is a small tributary of the Chilko halfway between Hanceville and Riske Creek, sampled where it crosses a gravel road in the lower valley.

15. Christian Creek (North Thompson) (50°; 119°; NW) (04-0600-150) - samples were taken from groundwater seepages near the pilot hatchery and well site just east of Heffley Lake. Christian Creek samples were taken from various locations downstream before the creek flows into Louis Creek.

16. Clear Creek (lower Skeena) (54°; 128°; NW) (43-1400) - sampled at the main logging road bridge on the east side of the upper Kitsumkalum Valley.

17. Clearwater River (North Thompson) (51°; 120°; NE) (04-1500) - some river samples were taken at the mouth and some below the old Highway #5 bridge near the hatchery site in Clearwater. The consultant studies (1981, 1982) were taken at up river trap sites and at the logging road bridge. The wells are at the hatchery site across the old Highway #5 from Dutch Lake. Mike's well is a private, dug well (1.5 m diameter) below the hillside on the south side of the old Highway #5 near the hatchery site (also see Dutch Lake).

18. Crazy Creek (South Thompson) (50°; 118°; NW) (03-4300-060) - samples were taken from the left (east) bank about 100 m downstream of the Highway #1 bridge at Taft (Eagle Hatchery area).

19. Dala River (Kitimat Arm) (53°; 128°; NW) (91-8900) - sampled at the B.C. Hydro road crossing near the mouth, above tidal influence.

20. Devereux Creek (Knight Inlet) (51°; 125°; SW) (90-5300-010) - sampled at the mouth and at the outlet of lower Devereux lake. High Lake is the only lake-headed tributary on the left bank of Devereux (Mussel) Creek, sampled at the lake outlet.

21. Dry Creek (lower Skeena) (54°; 128°; NW) (43-1350) - samples were taken at both the upper and lower springs and at the main logging road bridge below the beaver pond. The creek empties into swamps at the north east corner of Kitsumkalum Lake.

22. Dutch Lake (North Thompson) (51°; 120°; NE) (04-1500-030) - surface samples were taken at the public campsite on the old highway; depth samples were taken in the middle of the lake. Well samples were taken from the domestic water supply (dug well, 1.5 m diameter) of the Dutch Lake Resort on the west side of Dutch Lake.

23. Eagle River (South Thompson) (50°; 119°; NE) (03-4300) - some samples were taken at the CPR bridge at Taft (Eagle Hatchery effluent site) and some near the mouth during a 1981 consultant study. The wells are on the Eagle Hatchery site at Taft.

24. Eurocan - see Kitimat

25. Finn Creek (North Thompson) (51°; 119°; NE) (04-5000) - some samples were taken just upstream of the mouth and some were taken above the Highway #5 bridge near the well site. Well #1 is up a logging road southeast of the highway,

Well #2 (artesian) is on the left bank of Finn Creek east of the rest stop campsite on the highway.

26. Glendale Creek (Knight Inlet) see Tom Browne.

27. High Lake - see Devereux

28. Hirsch Creek (Kitimat Valley) (54°; 128°; SW) (91-9000-050) - sampled at the Highway #25 bridge near the mouth.

29. Holmes River (upper Fraser) (54°; 120°; SE) (00-7200) - sampled between the falls and the Highway #16 bridge.

30. Horetzky Creek (Gardner Canal) see Kemano.

31. Horsefly River (middle Fraser) (52°; 121°; SE) (06-5460) - samples were taken above the mouth near Quesnel Lake.

32. Indian River (Indian Arm) (49°; 122°; SW) (90-0500) - surface samples were taken between the falls and the main logging road bridge. Well samples came from a number of wells throughout the lower valley flats area.

33. Jones Creek (Lower Fraser) (49°; 122°; NE) (00-3900-150) - the Ryan thermograph was placed near the spawning channel intake.

34. Joseph Creek (North Thompson) (51°; 120°; SE) (04-1300) - samples were taken just upstream of the mouth.

35. Kakweiken River (Thompson Sound) (50°; 126°; NE) (90-6100) - sampled at the fishway.

36. Kemano River (Gardner Canal) (53°; 128°; SE) (91-8500) - samples were taken from wells near the old garbage dump, from the river adjacent to the wells and from the tailrace of the Alcan powerhouse. The temperature data came from DFO Habitat Protection Division monitoring. Horetzky Creek (91-8500-250) and Seekwakin Creek samples were taken at the road bridges.

37. Kildala River (Kitimat Arm) (53°; 128°; NE) (40-0010) - sampled above tidal influence at the mouth.

38. Kitimat River (54°; 128°; SW) (91-9000) - river water samples were taken at various locations near the Eurocon intake and hatchery site and at the lower (Haisla) and upper (17 Mile) Highway #25 bridges. The wells are in the upper watershed (1978) and at the present hatchery site (1979, 1980 and 1984). Eurocan samples came from process water at the screen bay, pre-condensor and post-condensor points inside the Eurocon pulp mill.

39. Kitlope River (Gardner Canal) (53°; 127°; SW) (91-8300) - sampled at Kitlope lake outlet.

40. Kowesas River (Gardner Canal) (53°; 128°; SE) (91-8200) - sampled near the mouth, above tidal influence.

41. Kwalate River (Knight Inlet) (51°; 126°; SE) (90-5600) - sampled at the mouth.

42. Lemieux Creek (North Thompson) (51°; 120°; SE) (04-1200) - sampled at the Highway #5 bridge.

43. Lion Creek (North Thompson) (51°; 119°; NE) (04-4800) - sampled just upstream of the mouth.

44. Mahood River (North Thompson) (51°; 120°; NE) (04-1500-160) - river samples were taken at the bridge abutments upstream of the mouth. The wells are beside the old logging, road between the Mahood and Clearwater Rivers near their confluence.

45. McNamee Creek (North Thompson) see Seymour.

46. Morkill River (upper Fraser) (54°; 121°; SE) (00-6800) - sampled at the mouth.

47. Mikes Well (North Thompson) see Clearwater.

48. Nechako River (upper Fraser) (54°; 125°; SE) (08-0000) - river samples were taken upstream of the mouth of Greer Creek (08-3500). The wells are located in the old river bed near the mouth of the Chesiatta River.

49. Nicola River (Thompson) (50°; 121°; NE) (02-2500) - river samples were taken from the side channel at the Highway #5 bridge immediately below the Nicola Lake outlet. Other sampling sites were at the mouth of Spius Creek and at the park near the Nicola River mouth at Spences Bridge. The temperature data came from DFO Field Services records from Taylor chart recorder thermographs placed in a groundwater fed, earthen rearing pond on private property near Lower Nicola.

50. Nitinat River (Vancouver Island) (48°; 124°; NW) (93-1500) - well samples were taken at the hatchery site located at the confluence of the Nitinat and Little Nitinat (93-1500-450) Rivers. River samples were taken adjacent the hatchery to site.

51. North Thompson River (50°; 120°; NE) (04-0000) - sampled in 1981 from the Highway #5 side of the river across from Boulder, in 1982 at the Highway #5 bridge over the North Thompson at Barriere.

52. Penny - see Rankin Creek.

53. Perry River (South Thompson) (50°; 118°; NW) (03-4300-050) - sampled at the Highway #1 bridge near Malakwa.

54. Puntzi Well (Middle Fraser) see Chilko.

55. Quesnel River (middle Fraser) (52°; 123°; NW) (06-0000) - river samples were taken adjacent to the hatchery site or near the Likely bridge. The wells are on the hatchery site on the right bank just downstream of the Likely bridge.

56. Raft River (North Thompson) (51°; 119°; NW) (04-1700) - samples were taken at the Highway #5 bridge and halfway between the bridge and the mouth, on the MacKenzie property.

57. Rankin Creek (upper Fraser) (53°; 121°; NE) (00-6500) - sampled at the pilot hatchery on the Boudreau property in Penny and at the head pond for the old Penny mill supply pipe.

58. Ratchford (South Thompson) see Seymour.

59. Salmon River (South Thompson) (50°; 119°; NE) (03-5200) - sampled at the Highway #1 bridge near the mouth in the town of Salmon Arm.

60. Savona (Thompson) (50°; 120°; NW) (03-0000) - sampled at the inlet and outlet pipes of the cooling water supply to the Trans Mountain Pipeline Co. transmission station. The temperature data came from B.C. Pollution Control Branch monitoring of the cooling water discharge.

61. Seymour River (South Thompson) (51°; 118°; SW) (03-3300) - Seymour River, Ratchford Creek (03-3300-020) and McNomee Creek (03-3300-010) samples were taken at the respective bridges on the main logging road.

62. Shuswap River (South Thompson) (50°; 118°; SW) (03-5400) - samples were taken near Wilsey Dam on the Middle Shuswap River at Shuswap Falls outside Lumby. River samples were taken from the head pond, from the penstocks inside the powerhouse and from the river adjacent to the hatchery site. The wells are on the hatchery site on an island just downstream of the dam, off Fergusen Road. River temperature data came from Ryan thermographs placed

at different depths in the dam head pond.

63. Slim Creek (upper Fraser) (54°; 121°; SW) (00-6600) - sampled below the Highway #16 bridge.

64. South Pass Creek (South Thompson) (56°; 127°: NE) (03-4300-090) - sampled at the Highway #1 bridge near the mouth.

65. South Thompson River (50°; 120°; NE) (03-0000) - sampled at the Chase bridge.

66. Spius Creek (Thompson-Nicola) (50°; 121°; SE) (02-2500-250) - samples were taken at the Water Survey of Canada discharge monitoring station at the logging bridge crossing Spius Creek, 1 km upstream of the mouth. The wells are located on the hatchery site on Sunshine Valley Road, near Canford.

67. Stave River (lower Fraser) (49°; 122°; NW) (00-0400) - thermographs were placed in the reservoir at the top of the B.C. Hydro dam.

68. Stuart River (upper Fraser) (54°; 124°; SE) (09-0000) - River samples were taken at Davidson's Landing during the 1980 consultant study. The well is at the Stuart Pilot Hatchery, located in the town of Fort Saint James.

69. Swift Creek (upper Fraser) (53°; 119° SW) (00-8200-050) - sampled at the incubation box site near the Valemont Village water supply pump house intake.

70. Tappen Creek (South Thompson-Salmon Arm) (50°; 119°; NE) (03-5000) - sampled at the Highway #1 bridge.

71. Taseko River (Chilco) (52°; 123°; SW) (05-3835-115) - samples were taken at various locations around a groundwater seepage leading to a beaver pond located on a bench above the Taseko River about 5 km south of its confluence with the Chilko. Initial samples were taken in the creek below the beaver dam and just above the creek mouth.

72. Tenderfoot Creek (Squamish) (50°; 123°; SW) (90-1300-050-013) - samples were taken from the creek and lake adjacent to the hatchery site (where the wells are). Cheakamus River (49°; 123°; NE) (90-1300-050) samples came from below the bridge on the road to the hatchery.

73. Tete Jaune Cache (upper Fraser) (52°; 119°: NE) (00) - sampled at redds downstream of the Highway #1 bridge over the Fraser River.

74. Tezwa River (Gardner Canal) (53°; 127°; SW) (91-8300-150) - sampled near the mouth at Kitlope Lake.

75. Tom Browne (Knight Inlet) (50°; 125°; NW) (90-4900) - creek samples were taken just upstream of the confluence with Glendale Creek and above the bridge at the Lake outlet. Lake samples were taken in the east half of the lake beyond the outlet shelf. Glendale Creek (90-4900-010) samples were taken just above the confluence with Tom Browne Creek opposite the proposed spawning channel site.

76. Torpy River (upper Fraser) (54°; 121°; SE) (00-6700) - sampled at the mouth.

77. Trinity Creek (South Thompson-Shuswap) (50°; 118°; NW) (03-5400-160) - sampled at the bridge on the main road from Enderby to Trinity Valley.

78. Whitehorse (Yukon) - samples were taken from the municipal wells below the Whitehorse Rapids Dam and fishway and from the reservoir near the intake to the Whitehorse town water supply.

79. Willow River (middle Fraser) (54°; 122°; SE) (00-5900) - sampled at the Highway #16 bridge.

80. Wilsey Dam - see Shuswap

81. Withrow Creek - See Chilko

WATER QUALITY DATA

Water quality data are presented in tables on the following pages. The sample locations are arranged in alphabetical order as per the list of locations which starts on page 7. Depending on the number of samples taken at a particular location, only part of a page or several pages may contain data from that location.

The first column in each table lists the water quality parameters. See Table 1 for explanations of the abbreviations used.

The second column shows recommended levels for each parameter. These levels were drawn from the literature and are used as rough criteria by which analysis results are 'tagged' for further consideration. They are not hard and fast limits. For instance, the upper limit recommended for nitrate is 0.12 mg/l but waters with concentrations above this are still suitable for fish culture. The 0.12 mg/l level simply indicates that there may be a risk of algal blooms fouling aeration towers, rearing containers or effluent channels.

The third column lists definite limits for some parameters which are known to be toxic to fish. However, even waters which have values outside of these limits may be suitable for fish culture if they are treated (eg. aerated or filtered) to bring them within the limits.

The fourth and subsequent columns list the water quality analysis results for individual samples. The top of each column normally lists the date the sample was taken and a location descriptor. Pump tests and some other samples also have the time of day or the time after the start of the pump test.

To find the water quality of a particular site, first look in the list of locations to see what name the location is under (eg. Withrow is under Chilko), then go to the appropriate data table (Chilko) and find the sub location (Withrow) column. Table 2 gives a summary of which times of the year each location has been sampled.

WATER QUALITY VALUE FOR ADAMS RIVER 1981/3
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	APR21/81 ADAMS RIVER	MAY26/81 ADAMS RIVER	JUN30/81 ADAMS RIVER	SEP01/81 ADAMS RIVER	SEP24/81 ADAMS RIVER	OCT20/81 ADAMS RIVER	AUG04/82 ADAMS RIVER	FEB08/83 ADAMS RIVER	AUG04/82 ADAMS WELL	AUG04/82 @ GOLD CREEK	AUG04/82 GOLD CREEK	FEB08/83 GOLD CREEK
ALK.TOT	20-300		27.9	26	26.8	23.9	22.5	23.5	24	26	26	24	72	88
AMMON.	<.002	>.08	0	0	0	0	.013	.02	.006	0	0	.006	.006	.01
CO2	2-5	>20												
CHLOR.	<170	>400	0	0	.52	0	0	0	0	0	0	0	.5	.5
COLOR	<15													
COND.FLD	150-2000													
COND.LAB	**		73	63.3	64	57.5	56	60	56.7	60.8	61.5	55.7	171	235
DO-PPM	>6-8	<4												
DO-SAT	100%													
DGAS.TOT	<103%	>110%												
DGAS.NIT	100%													
HARDNESS	20-400		31.8	6.75	27.3	24.7	24	24.5	23.1	25.7	26.3	22.4	84.4	109
H2S	<.002	>.004												
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.106	.096	.123	.047	.156	.064	.09	.12	.08	.09	.03	2.11
PH-FLD	6.8-8.5	<5,>9												
PH-LAB	**	**	7.6	7.7	7.6	7.8	7.6	7.9	7.3	7.7	6.9	7.4	8	8
PHOSPH.	<.05		.0056	0	0	0	.014	0	0	0	0	.006	0	.005
RESID.TOT	<2000													
RESID.FIL	70-600		51	40	47	47	46	44	38	45	38	39	104	150
RESID.N.F	<3		0	8	6.5	0	0	0	0	0	0		0	0
SALIN.														
SILICA	<10-60						2.98		2.5	3	2.5	2.5	3.8	4.1
SULFATE	<90		5.6	4.79	5	4.8	3.45	5.85	4.2	4.8	5.1	4.8	14.2	23.8
TASTE	OK													
T.D.SOL	500-1000	15000												
TEMP.	4-18C	<2,>25	5	6	8	17.5								
TURBID	1-60	>1000	0	1.8	1.4	0	0	0	0	0	.1	.2	.1	0
METALS--														
AL	<.1	>5	.065	.437	.129	0	0	0	.05	0	.05	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0	0
BA	<1		.0075	.0048	.0065	.0065	.0063	.0062	.006	.007	.005	.006	.009	.011
CA	4-150	>300	10.2	2.29	8.67	7.93	7.81	7.9	7.4	8.2	8.3	7.2	26.3	38
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	.006	.41	0
CU	<.006		0	0	.0011	0	0	0	.005	0	0	.004	.006	0
FE	<.3		.0373	.22	.198	.0215	.0629	.0235	.04	.013	.093	.042	.047	0
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0	0	0
K		>50	.625	.608	.619		.537	.807	.54	.58	.48	.54	.76	.8
MG	<10	>100	1.54	.25	1.37	1.19	1.1	1.16	1.1	1.2	1.2	1	3.2	3.4
MN	<.05	>15	.0039	.0138	.0038	.0011	.0029	0	.002	.002	.012	.002	.003	0
NO			0	0	0	0	0	0	0	0	0	0	.005	0
NA		>500	1.39	0	1.11	.93	.95	.99	.9	1	.8	.9	1.3	2.1
NI			0	0	0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60		3.12	2.94	3.1	3.06	2.78	2.76	2.5	2.8	2.6	2.6	3.7	3.8
SN			0	0	0	0	0	0	.01	0	0	0	0	0
SR			.0618	.0201	.0546	.0486	.0503	.0512	.044	.053	.048	.044	.143	.231
TI			0	.0097	.007	.0071	.0067	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	.0013	.0024	0	0	0	0	0	.002	0	.004	0

WATER QUALITY VALUES FOR ANNUNATI
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	SEP08/81 ANNUNATI RIVER
ALK.TOT	20-300		2.9
AMMON.	<.002	>.08	.0092
CO2	2-5	>20	
CHLOR.	<170	>400	0
COLOR	<15		
COND.FLD	150-2000		
COND.LAB	**		6.5
DO-PPM	>6-8	<4	
DO-%SAT	100%		
DGAS.TOT	<103%	>110%	
DGAS.HIT	100%		
HARDNESS	20-400		
H2S	<.002	>.004	
NITRITE	<.012	.2	0
NITRATE	<.12		.04
PH-FLD	6.8-8.5	<5,>9	
PH-LAB	**	**	6.5
PHOSPH.	<.05		.0067
RESID.TOT	<2000		
RESID.FIL	70-400		16
RESID.N.F	<3		0
SALIN.			
SILICA	<10-60		.83
SULFATE	<90		1
TASTE	OK		
T.D.SOL	500-1000	15000	
TEMP.	4-18C	<2,>25	
TURBID	1-60	>1000	0
METALS--			
AL	<.1	>5	.061
AS	<.5	>1	0
BA	<1		.0032
CA	4-150	>300	.537
CD	<.0004		0
CO			0
CR	<.01		0
CU	<.006		.0019
FE	<.3		.157
HG	<.00005	>.0002	0
K		>50	.215
MG	<10	>100	0
MN	<.05	>15	.002
MO			0
NA		>500	0
NI			0
P			0
PB	<.01		0
SB			0
SE		>2.5	0
SI	<10-60		.76
SN			0
SR			.003
TI			.0115
V			0
ZN	<.005		.0016

WATER QUALITY VALUES FOR BARRIERE
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	MAY04/82 BARRIERE RIVER	JUN02/82 BARRIERE RIVER	JUL06/82 BARRIERE RIVER	JUL20/82 BARRIERE RIVER
ALK.TOT	20-300		51	29	31	40
AMMON.	<.002	>.08	0	.007	0	0
CO2	2-5	>20				
CHLOR.	<170	>400	1.2	.6	1.7	.7
COLOR	<15		7			
COND.FLD	150-2000					
COND.LAB	**		128	73.6	74	92.2
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.HIT	100%					
HARDNESS	20-400		59.3	34.8	32.9	45.9
H2S	<.002	>.004				
NITRITE	<.012	.2	.009	.008	.006	.007
NITRATE	<.12		.09	.06	.02	.03
PH-FLD	6.8-8.5	<5,>9	6.4			
PH-LAB	**	**	7.8	7.5	7.5	7.6
PHOSPH.	<.05		.009	.014	.066	.012
RESID.TOT	<2000					
RESID.FIL	70-400		85	62	58	69
RESID.N.F	<3		0	24	86	35
SALIN.						
SILICA	<10-60		4.7	3.8	3.5	3.6
SULFATE	<90		11.3	4.4	5.3	4.6
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25	7			
TURBID	1-60	>1000	3.3	7.5	15	3.1
METALS--						
AL	<.1	>5	.11	.19	.42	.18
AS	<.5	>1	0	0	0	0
BA	<1		.011	.008	.013	.011
CA	4-150	>300	17.3	10.1	8.8	13.3
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	0	0
CU	<.006		0	.001	.003	0
FE	<.3		.124	.229	.108	.261
HG	<.00005	>.0002	0	0	0	0
K		>50	.73	.68	.52	.95
MG	<10	>100	3.7	2	.2	2.7
MN	<.05	>15	.008	.014	.004	.014
MO			.005	0	0	0
NA		>500	2.1	1.5	.4	1.9
NI			0	0	0	0
P			0	0	0	0
PB	<.01		0	0	0	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		4.5	4.1	2	4.1
SN			0	0	0	0
SR			.084	.051	.022	.064
TI			.004	.007	.005	.011
V			0	0	0	0
ZN	<.005		0	0	0	.003

WATER QUALITY VALUES FOR BESSETTE
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUL25/82 BESSETTE CREEK
ALK.TOT	20-300		70.5
AMMON.	<.002	>.08	0
CO2	2-5	>20	
CHLOR.	<170	>400	1.5
COLOR	<15		
COND.FLD	150-2000		
COND.LAB	**		174
DO-PPM	>6-8	<4	
DO-%SAT	100%		
DGAS.TOT	<103%	>110%	
DGAS.NIT	100%		
HARDNESS	20-400		80.9
H2S	<.002	>.004	
NITRITE	<.012	.2	.009
NITRATE	<.12		.1
PH-FLD	6.8-8.5	<5,>9	
PH-LAB	**	**	
PHOSPH.	<.05		.039
RESID.TOT	<2000		
RESID.FIL	70-400		134
RESID.N.F	<3		15
SALIN.			
SILICA	<10-60		6.6
SULFATE	<90		15.1
TASTE	OK		
T.D.SOL	500-1000	15000	
TEMP.	4-18C	<2,>25	
TURBID	1-60	>1000	2.9
METALS--			
AL	<.1	>5	.16
AS	<.5	>1	0
BA	<1		.019
CA	4-150	>300	24.5
CD	<.0004		0
CO			0
CR	<.01		0
CU	<.006		0
FE	<.3		.363
HG	<.00005	>.0002	0
K		>50	
MG	<10	>100	4.3
MN	<.05	>15	.037
MO			0
NA		>500	3.6
NI			0
P			0
PB	<.01		0
SB			0
SE		>2.5	0
SI	<10-60		7.2
SN			0
SR			.146
TI			.008
V			0
ZN	<.005		0

WATER QUALITY VALUES FOR BISH
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	APR04/81 BISH CREEK	MAY16/81 BISH CREEK	JUN12/81 BISH CREEK	JUL30/81 BISH CREEK
ALK.TOT	20-300		6.3	8.82	6.9	7.86
AMMON.	<.002	>.08	.0062	0	0	.0157
CO2	2-5	>20				
CHLOR.	<170	>400	9.71	0	0	50
COLOR	<15					
COND.FLD	150-2000					
COND.LAB	**		54	16.1	17.3	217
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.NIT	100%					
HARDNESS	20-400		9.76	5.8	5.2	24
H2S	<.002	>.004				
NITRITE	<.012	.2	0	0	0	0
NITRATE	<.12		.04	.024	.0136	.037
PH-FLD	6.8-8.5	<5,>9			7.6	
PH-LAB	**	**	6.7	7.5	6.9	7.1
PHOSPH.	<.05		.027	0	0	0
RESID.TOT	<2000					
RESID.FIL	70-400		45	16	16	125
RESID.N.F	<3		30	0	0	0
SALIN.						
SILICA	<10-60		1.02	.98	1.11	1.08
SULFATE	<90		4.6	1.35	1.8	9.9
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25			8.5	
TURBID	1-60	>1000	18	0	0	0
METALS--						
AL	<.1	>5	.765	.116	0	0
AS	<.5	>1	0	0	0	0
BA	<1		.0137	.0081	.0089	.0117
CA	4-150	>300	2.21	1.96	1.85	3.33
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	.4555	0
CU	<.006		.0018	.0025	.0019	0
FE	<.3		.699	.0373	.0216	.0225
HG	<.00005	>.0002	0	0	0	0
K		>50	.535	.194	.554	.694
MG	<10	>100	1.03	.22	.14	3.81
MN	<.05	>15	.021	.0022	0	.0014
MO			0	0	0	0
NA		>500	5.75	.51	.52	28.3
NI			0	0	0	0
P			0	0	0	0
PB	<.01		0	0	.002	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		1.88	.93	.98	1.04
SN			0	0	0	0
SR			.0775	.0185	0	.0374
TI			.0172	0	.02	.0086
V			0	0	0	0
ZN	<.005		.0028	.0143	.0045	.002

WATER QUALITY VALUES FOR BLACKWATER
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	MAY08/80 UPPER SITE	JUL23/80 UPPER SITE	JUL23/80 LOWER SITE
ALK.TOT	20-300		207	200	205
AMMON.	<.002	>.08	0	0	0
CO2	2-5	>20			
CHLOR.	<170	>400	.8	0	0
COLOR	<15		0	5	0
COND.FLD	150-2000				
COND.LAB	**		418	391	390
DO-PPM	>6-8	<4			
DO-%SAT	100%				
DGAS.TOT	<103%	>110%			
DGAS.NIT	100%				
HARDNESS	20-400		200	196	200
H2S	<.002	>.004			
NITRITE	<.012	.2	0	0	0
NITRATE	<.12		.05	.03	.12
PH-FLD	6.8-8.5	<5,>9	8	9.5	9.5
PH-LAB	**	**	7.9	8.1	8.1
PHOSPH.	<.05		.15	.18	.15
RESID.TOT	<2000				
RESID.FIL	70-400		256	211	244
RESID.N.F	<1		0	0	0
SALIN.					
SILICA	<10-60		11	11.1	10.1
SULFATE	<90		21.1	15.4	10.5
TASTE	OK		ok	ok	ok
T.D.SOL	500-1000	15000			
TEMP.	4-18C	<2,>25	7.5-9.5	7.8-14	6.5-7.7
TURBID	1-60	>1000	0	0	1.5
METALS--					
AL	<.1	>5	0	0	0
AS	<.5	>1	0	0	0
BA	<1		.03	.03	.05
CA	4-150	>300	42	42	43
CD	<.0004		0	0	0
CO			0	0	0
CR	<.01		0	0	0
CU	<.006		0	0	0
FE	<.3		0	0	0
HG	<.00005	>.0002	0	0	0
K		>50	5.6	5	5.1
MG	<10	>100	22.8	22.1	22.2
MN	<.05	>15	0	.003	.008
MO			0	0	0
NA		>500	11.4	8.6	8.2
NI			0	0	0
P			0	0	0
PB	<.01		0	0	0
SB			0	0	0
SE		>2.5	0	0	0
SI	<10-60		13	13	16
SN			0	0	0
SR			.239	.212	.237
TI			0	0	0
V			0	0	0
ZN	<.005		.003	0	0

WATER QUALITY VALUES FOR BLUE
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUL29/81 BLUE RIVER	AUG25/81 BLUE RIVER	SEP30/81 BLUE RIVER	OCT13/81 BLUE RIVER
ALK.TOT	20-300		11.5	14.6	13.9	8.21
AMMON.	<.002	>.08	0	0	.0115	0
CO2	2-5	>20				
CHLOR.	<170	>400	0	0	0	0
COLOR	<15					
COND.FLD	150-2000					
COND.LAB	**		27.1	37.5	37.8	39.5
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.NIT	100%					
HARDNESS	20-400		10.2	15.6	15	16.4
H2S	<.002	>.004				
NITRITE	<.012	.2	0	0	0	0
NITRATE	<.12		.033	.062	.185	.159
PH-FLD	6.8-8.5	<5,>9				
PH-LAB	**	**	7.2	7.4	7.3	7.3
PHOSPH.	<.05		0	.0054	0	.0029
RESID.TOT	<2000					
RESID.FIL	70-400		11	27	12	35
RESID.N.F	<1		2	0	0	13
SALIN.						
SILICA	<10-60		1.57	2	2.2	3.8
SULFATE	<90		1.8	3.4	1.8	4.45
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25				
TURBID	1-60	>1000	1	0	0	1.1
METALS--						
AL	<.1	>5	0	.059	.063	.163
AS	<.5	>1	0	0	0	0
BA	<1		.0028	.0031	.0028	.0037
CA	4-150	>300	3.8	5.48	5.35	5.03
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	0	0
CU	<.006		0	0	0	0
FE	<.3		.0716	.0667	.059	.122
HG	<.00005	>.0002	0	0	0	0
K		>50	.239	.357	.338	.386
MG	<10	>100	.18	.46	.4	.56
MN	<.05	>15	.0025	.0023	.0023	.0066
MO			0	0	0	0
NA		>500	0	.7	.75	.88
NI			0	0	0	0
P			0	0	0	0
PB	<.01		0	0	0	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		1.5	2.08	2.16	2.88
SN			0	0	0	0
SR			.021	.0277	.0285	.0309
TI			0	0	0	.012
V			0	0	0	0
ZN	<.005		.0043	.0025	.0013	.0015

WATER QUALITY VALUES FOR BONROH
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	MAR19/79 (1) SIDE CHANNEL	JUN26/79 (1) SIDE CHANNEL	JUN26/79 (2) SIDE CHANNEL	JUN26/79 (3) SIDE CHANNEL	MAR19/79 MR GRND WATER	AUG28/79 HATCHERY SITE	OCT16/79 NEAR HATCHERY	APR09/80 BOX AT LOWER	APR09/80 LOWER POOL	APR09/80 LOWER WELL	APR09/80 EAST STREAM
ALK.TOT	20-300		127	122	132	112	127	122	82	120	137	132	169
AMMON.	<.002	>.08	0	0	0	0	0	.005	0	0	0	0	0
CO2	2-5	>20											
CHLOR.	<170	>400	0	0	0	0	0	0	0	.6	.64	.6	.77
COLOR	<15		0	0	0	0	0		0				
COND.FLD	150-2000								161				
COND.LAB	**		253	234	254	215	253	232	162	236	269	259	332
DO-PPM	>6-8	<4	12	11	11		12		11.4				
DO-%SAT	100%		100	90	85		100		92				
DGAS.TOT	<103%	>110%		107	103				100				
DGAS.HIT	100%			112	108				100				
HARDNESS	20-400		134	121.4	131	111.4	133.8	125.2	83.7	128	145	140	172
H2S	<.002	>.004											
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.148	.042	.083	.0679	.148	.046	.013	.0621	.0968	.0628	.106
PH-FLD	6.8-8.5	<5,>9		8	8		8		8.1				
PH-LAB	**	**	8	7.8	7.7	7.9	8	8	8	8.1	7.8	8	7.3
PHOSPH.	<.05		0	0	0	0	0	0	0	0	0	0	0
RESID.TOT	<2000		153	145	151	142	153						
RESID.FIL	70-400		151	145	151	142	151	153	100	138	155	150	185
RESID.N.F	<3		0	0	0	0	0	0	0	0	0	0	0
SALIN.													
SILICA	<10-60		5	4.98	4.85	5.66	5	5.1	1.9	4.95	4.65	4.84	4.14
SULFATE	<90		2.8	2.6	2.6	2.3	2.8	2.6	3.68	3.4	3.6	4.95	4.5
TASTE	OK		OK	OK	OK	OK	OK						
T.D.SOL	500-1000	15000											
TEMP.	4-18C	<2,>25	7	7	4.5	5.5	7		5.1				
TURBID	1-60	>1000		0	0	0		0	0	1.1	0	0	0
METALS--													
AL	<.1	>5	0	0	0	0	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0
BA	<1		.0486	.0426	.0514	.0275	.0486	.0425	.032	.0419	.06	.0714	.0688
CA	4-150	>300	44	40	43.3	36.7	44	40.3	27.2	41.2	47.5	43.8	58.4
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	.001	0	0	0	0
FE	<.3		.08	.019	.014	.014	.08	.026	.048	.014	0	.078	0
HG	<.00005	>.0002	.0006	0	0	0	.00059	0	0	0	0	0	0
K		>50	.361	.29	.298	.301	.361	.33	.232	.342	.311	.354	.313
MG	<10	>100	5.82	5.22	5.56	4.8	5.82	5.97	3.84	6.13	6.52	7.34	6.36
MN	<.05	>15	.0065	0	0	0	.0065	0	.0033	0	0	0	0
MO			0	0	0	0	0	0	0	0	0	0	0
NA		>500	1.19	1.15	1.19	1	1.19	1.22	.8	1.19	1.34	1.35	1.25
NI			0	0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60		4.81	4.8	4.61	5.48	4.81	5.53	1.94	5.04	4.73	4.73	4.18
SN				0	0	0		0	0	0	0	0	0
SR			.179	.141	.159	.124	.179	.148	.147	.143	.174	.166	.249
TI			0	0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0	0
ZN	<.005		.05	0	0	0	.05	0	.0013	.0024	.0017	.0029	.0017

WATER QUALITY VALUES FOR BONBON (CON'T)
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	APR14/80 UPPER SPRING	MAY07/80 UPPER SPRING	MAY12/80 UPPER SPRING	JUN23/80 UPPER SPRING	JUL15/80 UPPER SPRING	JUL23/80 UPPER SPRING	AUG27/80 UPPER SPRING	SEP22/80 UPPER SPRING	SEP24/80 UPPER SPRING
ALK.TOT	20-300		62.9	56.1	64.2	48	53		57.5	57.4	57.4
AMMON.	<.002	>.08	.0085	0	0	0	0		.0168	.0054	.0054
CO2	2-6	>30									
CHLOR.	<170	>600	0	0	0	.77	0		.51	0	0
COLOR	<15		0	10	20	10	10		5		
COND.FLD	150-2000										
COND.LAB	**		132	113	96	108	113		125	117	117
DO-FLD	>6-8	<4					9.1		9	10	10
DO-SAT	100%										
DGAS.TOT	<103%	>110%									
DGAS.BIT	100%										
HARDNESS	20-400		66	56	49.5	52.2	55.1	93.3	65.5	55.8	55.8
H2S	<.002	>.004									
NITRITE	<.012	.2	0	0	0	0	0		0	0	0
NITRATE	<.12		.194	.7434	.0852	.769	.0213		.0344	.0454	.0454
PH-FLD	6.8-8.5	<5,>9		7.5			7.8	8	8	8	8
PH-LAB	**	**	7.8	7.4	7.5	7.6	7.6		7.9	7.9	7.9
PHOSPH.	<.05		.0134	.0078	.0109	.0111	.0093		.0065	.0089	.0089
RESID,TOT	<2000										
RESID,FIL	70-400		91	71	62	75	77		80	82	82
RESID,V,F	<3		7	0	12	8	0		0	8	8
SALIN.			0								
SILICA	<10-60		2.78	2.86	218	1.15	2.48		2.34	2.4	2.4
SULFATE	<90		7.4	4.5	3.3	4.35	3.2		3.55	3.45	3.45
TASTE	OK			OK							
V,D,SOL	500-1000	15000									
TEMP,	4-18C	<2,>25		6			14	8	13	9	9
TURBID	1-60	>1000	3.4	2.4	4.9	0	1.9		1.4	2.3	2.3
METALS--											
AL	<.1	>5	0	0	.12	0	0	0	0		0
AS	<.5	>1	0	0	0	0	0	0	0		0
BA	<1		.0453	.0493	.0227	.0285	.0627	.0966	.0289		.0281
CA	4-150	>300	20.8	16	15.7	16.6	17.3	29.5	20.8		17.6
CD	<.0004		0	0	0	0	0	0	0		0
CO			0	0	0	0	0	0	0		0
CR	<.01		0	0	0	0	0	0	0		0
CU	<.006		.0013	.0013	.0011	.0015	0	0	.0027		0
FE	<.3		.408	.175	.238	.17	.145	.147	.202		.224
HG	<.00005	>.0002	0	0	0	0	0	0	0		0
F		>50	.4	.224	.214	.29	.192	.189	.267		.196
MG	<10	>100	3.42	3.9	2.49	2.68	2.89	4.76	3.3		2.87
MN	<.05	>15	.0321	.0171	.0187	.0168	.0125	.0193	.0138		.0175
MO			0	0	0	0	0	0	0		0
NA		>500	.782	.607	.573	.673	.81	.937	.789		.633
NI			0	0	0	0	0	0	0		0
P			0	0	0	0	0	0	0		0
PB	<.01		0	0	0	0	0	0	.0014		0
SB			0	0	0	0	0	0	0		0
SE		>2.5	0	0	0	0	0	0	0		0
SI	<10-60		2.65	2.83	2.19	2.34	2.37	3.82	2.43		2.5
SN			0	0	0	0	0	0	0		0
SR			.929	.0633	.066	.0771	.0834	.107	.0894		.0925
TI			0	0	0	0	0	0	0		0
V			0	0	0	0	0	0	0		0
ZN	<.005		.0043	.0022	.0026	.0057	.0063	0	.0111		0

WATER QUALITY VALUES FOR BOMRON (CON'T)
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	OCT14/79 1 HR WELL B-3	OCT15/79 24 HRS WELL B-3	OCT16/79 48 HRS WELL B-3	OCT18/79 69 HRS WELL B-3
ALK.TOT	20-300		127	129	123	127
AMMON.	<.002	>.08	0	0	0	0
CO2	2-5	>20				
CHLOR.	<170	>400	0	0	0	0
COLOR	<15		0	0	0	0
COND.FLD	150-2000		240	225	210	225
COND.LAB	**		256	254	252	254
DO-PPM	>6-8	<4	1.2	1.1	1.1	.9
DO-%SAT	100%		9	9	8	7
DGAS.TOT	<103%	>110%	92	91	92	93
DGAS.NIT	100%		114	113	114	115
HARDNESS	20-400		134.8	134.8	135	134.8
H2S	<.002	>.004				
NITRITE	<.012	.2	0	0	0	0
NITRATE	<.12		.0332	.0505	.0878	.0523
PH-FLD	6.8-8.5	<5,>9	7.8	7.8	7.7	7.8
PH-LAB	**	**	7.9	7.8	7.7	7.9
PHOSPH.	<.05		.0052	0	0	.0088
RESID.TOT	<2000					
RESID.FIL	70-400		156	154	156	152
RESID.N.F	<3		6	0	0	0
SALIN.			0	0	0	0
SILICA	<10-60		4.94	4.94	4.76	4.73
SULPATE	<90		4.26	4.62	4.35	4.3
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25	5	4.9	4.7	4.7
TURBID	1-60	>1000	1.9	0	0	1.2
METALS--						
AL	<.1	>5	0	0	0	0
AS	<.5	>1	0	0	0	0
BA	<1		.0729	.0717	.073	.0713
CA	4-150	>300	41.6	41.6	41.6	41.6
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	0	0
CU	<.006		.0014	0	.001	0
FE	<.3		.113	.045	.04	.051
HG	<.00005	>.0002	0	0	0	0
K		>50	.439	.429	.426	.401
MG	<10	>100	7.51	7.51	7.56	7.52
MN	<.05	>15	.0113	.0073	.0066	.0061
MO			0	0	0	0
NA		>500	1.48	1.46	1.43	1.44
NI			0	0	0	0
P			0	0	0	0
PB	<.01		0	0	0	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		4.75	4.64	4.58	4.54
SN			0	0	0	0
SR			.167	.161	.161	.159
TI			0	0	0	0
V			0	0	0	0
ZN	<.005		.0071	.0054	.0042	.0071

WATER QUALITY VALUES FOR CECIL
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	APR07/80 MAIN CRNT HWY BRDG	APR17/80 NET SITE
ALK.TOT	20-300		12.5	13.8
AMMON.	<.002	>.08	.0113	.013
CO2	2-5	>20		
CHLOR.	<170	>400	1.08	.81
COLOR	<15			
COND.FLD	150-2000			
COND.LAB	**		31.2	34.2
DO-PPM	>6-8	<4		
DO-%SAT	100%			
DGAS.TOT	<103%	>110%		
DGAS.NIT	100%			
HARDNESS	20-400		15.4	16.1
H2S	<.002	>.004		
NITRITE	<.012	.2	0	0
NITRATE	<.12		.114	.101
PH-FLD	6.8-8.5	<5,>9		
PH-LAB	**	**	6.9	7.1
PHOSPH.	<.05		.0892	.032
RESID.TOT	<2000			
RESID.FIL	70-400		36	37
RESID.N.F	<3		122	30
SALIN.				
SILICA	<10-60		1.16	1.26
SULFATE	<90		3.35	3.3
TASTE	OK			
T.D.SOL	500-1000	15000		
TEMP.	4-18C	<2,>25	3.5	5.5
TURBID	1-60	>1000	36	4.8
METALS--				
AL	<.1	>5	.444	.231
AS	<.5	>1	0	0
BA	<1		.0183	.0134
CA	4-150	>300	5.11	5.43
CD	<.0004		0	0
CO			0	0
CR	<.01		0	0
CU	<.006		0	0
FE	<.3		.452	.289
HG	<.00005	>.0002	0	0
K		>50	.599	.532
MG	<10	>100	.652	.629
MN	<.05	>15	.0348	.0229
MO			0	0
NA		>500	1.18	1.19
NI			0	0
P			0	0
PB	<.01		0	0
SB			0	0
SE		>2.5	0	0
SI	<10-60		.95	.66
SN			0	0
SR			.0268	.0268
TI			.0138	0
V			0	0
ZN	<.005		0	0

WATER QUALITY VALUES FOR CHEHALIS
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	FEB18/80 CHEHALIS RIVER	FEB21/80 CHEHALIS RIVER	APR06/80 CHEHALIS RIVER	MAY13/80 CHEHALIS RIVER	JUL25/80 CHEHALIS RIVER
ALK.TOT	20-300		4.12	5.1	6.12	5.58	
AMMON.	<.002	>.08	.0084	0	0	0	
CO2	2-5	>20					
CHLOR.	<170	>400	1.06	.53	.5	0	
COLOR	<15		15	0			
COND.FLD	150-2000		13	12			
COND.LAB	**		16.8	23.4	24.4	22	
DO-PPM	>6-8	<4	13.2	12.5			
DO-SAT	100%		102	94.9			
DGAS.TOT	<103%	>110%	103	102.8			
DGAS.HIT	100%		104	104.9			
HARDNESS	20-400		7.28	9.49	9.74	8.15	
H2S	<.002	>.004					
NITRITE	<.012	.2	0	0	0	0	
NITRATE	<.12		.096	.258	.0799	.0747	
PH-FLD	6.8-8.5	<5,>9	6.6	5.6			
PH-LAB	**	**	6.3	6.5	6.8	6.7	
PHOSPH.	<.05		.0424	.0065	0	0	
RESID.TOT	<2000			27			
RESID.FIL	70-400		30	25	25	18	
RESID.N.F	<3		66	0	0	0	
SALIN.			0	0			
SILICA	<10-60		1.8	2.02	2.01	1.78	
SULFATE	<90		2.71	3.58	4.05	3.5	
TASTE	OK						
T.D.SOL	500-1000	15000					
TEMP.	4-15C	<2,>25	3.6	3.5	4		
TURBID	1-60	>1000	30	0	1.3	0	
METALS—							
AL	<.1	>5	.613	.155	.174	0	0
AS	<.5	>1	0	0	0	0	0
BA	<1		.0137	.0074	.0075	.0054	7
CA	4-150	>300	2.36	3.21	4.02	2.82	3.89
CD	<.0004		0	0	0	0	0
CO			0	0	0	0	0
CR	<.01		0	0	0	0	0
CU	<.006		0	0	0	0	0
FE	<.3		.328	.092	.082	.028	.01
HG	<.00005	>.0002	0	0	0	0	0
K		>50	.163	.146	.127	.119	.132
MG	<10	>100	.337	.357	.369	.269	.347
MN	<.05	>15	.0176	.0059	.0039	0	0
MO			0	0	0	0	0
NA		>500	.584	.615	.731	.582	.256
NI			0	0	0	0	0
P			0	0	0	0	0
PB	<.01		0	0	0	0	0
SB			0	0	0	0	0
SE		>2.5	0	0	0	0	0
SI	<10-60		2.21	2.22	2.14	1.73	3.39
SN			0	0	0	0	0
SR			.006	.0087	.0101	.0079	.0116
TI			.0101	0	0	0	0
V			0	0	0	0	0
ZN	<.005		0	0	.0016	.0042	0

WATER QUALITY VALUES FOR CHEHALIS
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	FEB17/80 1 HR WELL C1	FEB18/80 24 HR WELL C1	FEB19/80 47.5 HR WELL C1	FEB20/80 72 HR WELL C1	FEB21/80 91.5 HR WELL C1	APR06/80 CHEHALIS WELL #1	APR09/80 CHEHALIS WELL #1	MAY13/80 CHEHALIS WELL #1	APR16/80 CHEHALIS WELL #2	APR19/80 CHEHALIS WELL #3
ALK.TOT	20-300		8.5	6.7	6.7	6.94	6.63	8.16	8.09	6.9	8.12	12
AMMON.	<.002	>.08	0	0	0	0	.005	0	0	0	0	0
CO2	2-5	>20										
CHLOR.	<170	>400	.6	.53	.6	0	.57	0	.7	0	.52	0
COLOR	<15		0	0	0	0	0					
COND.FLD	150-2000		20	20	19	18	18					
COND.LAB	**		30.5	29.5	28.8	28.8	28.8	29.8	29.3	26.5	28.8	32.8
DO-PPM	>6-8	<4	10.8	9.6	10.5	10	10	9	9		11	9
DO-%SAT	100%		94.7	85.7	93.8	87.7	87	76.8	75.9		92.7	75.9
DGAS.TOT	<103%	>110%	107.2	107.6	107.7	106.5	106.5					
DGAS.NIT	100%		110.5	113.4	111.4	111.5	111.8					
HARDNESS	20-400		12	11.4	11.2	11.1	11.2	11.6	11.1	10	12.5	13.8
H2S	<.002	>.004										
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.099	.0928	.108	.137	.107	.0817	.0693	.0624	.0662	.108
PH-FLD	6.8-8.5	<5,>9	5.5	5.5	5.3	5.3	5.4	6.5	6.5		6.5	6.5
PH-LAB	**	**	6.5	6.1	6.2	6.2	6.2	6.6	6.5	6.3	6.5	6.7
PHOSPH.	<.05		0	0	0	0	0	0	0	0	.0211	0
RESID.TOT	<2000					25	24					
RESID.FIL	70-400		31	31	34	25	24	26	30	22	25	28
RESID.N.F	<3		0	0	0	0	0	0	0	0	37	0
SALIN.				0		0	0					
SILICA	<10-60		2.77	2.73	2.68	2.65	2.62	3.09	2.96	2.63	3.07	3.52
SULFATE	<90		5.3	4.98	4.96	4.83	4.99	4.8	3.6	4.5	4.55	5.1
TASTE	OK											
T.D.SOL	500-1000	15000										
TEMP.	4-18C	<2,>25	8.8	8.9	8.9	8.9	8.8	8.5	8		8	8
TURBID	1-60	>1000	0	0	0	0	0	0	0	4.9	2.8	0
METALS---												
AL	<.1	>5	0	0	0	0	0	0	0	0	.221	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0
BA	<1		.008	.0073	.0074	.0078	.0078	.0075	.0068	.0057	.0088	.0074
CA	4-150	>300	4.2	3.97	3.91	3.87	3.87	4.02	3.83	3.49	4.31	4.79
CD	<.0004		0	0	0	0	0	0	0	.0032	0	0
CO			0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	0	.0014	0
FE	<.3		.05	0	0	0	0	.019	0	.773	.242	.014
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0
K		>50	.13	.115	.121	.124	.115	.111	.106	.101	.135	.132
MG	<10	>100	.39	.368	.36	.36	.363	.39	.371	.322	.433	.438
MN	<.05	>15	.003	0	0	0	0	0	0	.014	.0054	.0068
MO			0	0	0	0	0	0	0	0	0	0
NA		>500	.9	.88	.865	.867	.826	.927	.807	.743	.904	.988
NI			0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0
SI	<10-60		2.8	2.73	2.65	2.67	2.58	3.16	2.88	2.47	3.15	3.28
SN			0	0	0	0	0	0	0	0	0	0
SR			.01	.0108	.0109	.0108	.0108	.0132	.0118	.0103	.0124	.0135
TI			0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	0	0	0	0	.0018	.0044	.0026	.0042	.0044

WATER QUALITY VALUES FOR CHILCOTIN
(BELOW DETECTION LIMITS=0

PARAM.	RECOMM.	TOXIC	JUN10/82 BAYLIFF CANAL	SEP03/82 BAYLIFF CANAL	FEB15/82 PUNTZI WELL	JUN09/82 PUNTZI WELL	SEP02/82 PUNTZI WELL	FEB10/83 PUNTZI WELL
ALK.TOT	20-300		74	92	177	178	180	180
AMMON.	<.002	>.08	0	0	0	0	0	0
CO2	2-5	>20						
CHLOR.	<170	>400	1.2	1.5	1.91	1.9	2.2	2
COLOR	<15							
COND.FLD	150-2000							
COND.LAB	**		130	177	375	370	376	377
DO-PPM	>6-8	<4						
DO-SAT	100%							
DGAS.TOT	<103%	>110%						
DGAS.HIT	100%							
HARDNESS	20-400		60.6	69.7	146	158	155	152
H2S	<.002	>.004						
NITRITE	<.012	.2	0	0	0	.006	0	0
NITRATE	<.12		0	.02	.117	.12	.012	.12
PH-FLD	6.8-8.5	<5,>9		8				
PH-LAB	**	**	8	8.3	8	7.9	7.9	8
PHOSPH.	<.05		.18	.174	.046	.05	.052	.057
RESID.TOT	<2000							
RESID.FIL	70-600		116	128	241	260	242	240
RESID.S.F	<3		16	6	0	0	12	0
SALIN.								
SILICA	<10-60		11	11.4	12.1	12.8	12.3	13.2
SULFATE	<90		3.8	2.8	18.4	17.6	17.3	17
TASTE	OK							
T.D.SOL	500-1000	15000						
TEMP.	4-18C	<2,>25		13				
TURBID	1-60	>1000	2.2	1.1	0	1	0	0
METALS—								
AL	<.1	>5	.09	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0
BA	<1		.004	.003	.006	.007	.006	.006
CA	4-150	>300	9.2	10	38.3	41.7	41.4	40.7
CD	<.0004		0	0	0	0	.006	0
CO			0	0	0	0	0	0
CR	<.01		0	.911	0	0	.008	0
CU	<.006		0	0	.003	0	.001	0
FE	<.3		.542	.274	.077	.027	.031	.006
HG	<.00005	>.0002	0	0	0	0	0	0
K		>50	2.27	3	4.38	4.41	3.75	4.34
MG	<10	>100	8.7	10.7	12.1	12.9	12.5	12.3
MN	<.05	>15	.035	.021	0	0	.001	0
MO			0	0	0	.005	.012	0
NA		>500	7.9	10	18.7	19.7	19.5	19
NI			0	0	0	0	0	0
P			.13	.18	.08	.06	.08	.07
PB	<.01		0	0	0	0	.06	0
SB			0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0
SI	<10-60		11.7	11	12.7	13.2	12.4	12.3
SN			0	0	0	0	0	0
SR			.058	.067	.193	.199	.201	.2
TI			.006	0	0	0	0	0
V			0	0	0	0	0	0
ZN	<.005		0	0	.012	.003	.007	.002

WATER QUALITY VALUES FOR CHILKO
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	FEB15/82 WITHROW CREEK	SEP03/82 CHILKO RIVER	SEP29/81 BAYLIFF SEEP	FEB15/82 BAYLIFF SEEP	JUN10/82 BAYLIFF SEEP	SEP03/82 BAYLIFF SEEP	FEB10/83 BAYLIFF SEEP
ALK.TOT	20-300		280	24	123	109	110	108	107
AMMON.	<.002	>.08	0	.006	.0068	.006	.007	.013	.014
CO2	2-5	>20							
CHLOR.	<170	>400	1.27	.7	1.34	2.11	1.8	1.4	1.8
COLOR	<15								
COND.FLD	150-2000								
COND.LAB	**		505	58.8	245	215	210	206	216
DO-PPM	>6-8	<4							
DO-%SAT	100%								
DGAS.TOT	<103%	>110%							
DGAS.HIT	100%								
HARDNESS	20-400		255	29.1	94	84.3	87.6	82	83
H2S	<.002	>.004							
NITRITE	<.012	.2	0	0	0	0	0	0	0
NITRATE	<.12		.418	.01	0	.13	0	.01	.009
PH-FLD	6.8-8.5	<5,>9		7.5					
PH-LAB	**	**	8.4	7.8	7.7	7.8	7.8	7.6	7.9
PHOSPH.	<.05		.064	.015	.151	.121	.15	.209	.161
RESID.TOT	<2000								
RESID.FIL	70-400		335	44	170	152	149	145	148
RESID.N.F	<3		0	9	0	0	0	0	6
SALIN.									
SILICA	<10-60		14.6	1.9	12.2	11.2	9.3	12	12
SULFATE	<90		8.4	5.8	1.4	4.8	3.9	3.2	2.7
TASTE	OK								
T.D.SOL	500-1000	>5000							
TEMP.	4-18C	<2,>25		13					
TURBID	1-60	>1000	0	12.5	0	0	.1	.3	.1
METALS—									
AL	<.1	>5	0	.5	0	0	.09	0	0
AS	<.5	>1	0	0	0	0	0	0	0
BA	<1		.027	.013	.0047	.004	.004	.005	.004
CA	4-150	>300	44.6	7.9	15.7	14	14.3	13.2	13.5
CD	<.0004		0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0
CR	<.01		0	0	0	.229	0	0	0
CU	<.006		.002	0	0	0	0	0	0
FE	<.3		.017	.495	.0778	.072	.097	.308	.132
HG	<.00005	>.0002	0	0	0	0	0	0	.0002
K		>50	4.93	.43	4	3.48	3.28	3	3.29
MG	<10	>100	34.8	1.4	13.3	11.9	12.6	11.7	11.9
MN	<.05	>15	0	.012	0	0	0	.008	.004
MO			0	0	0	.005	0	0	0
NA		>500	10.3	1.6	13.4	11.2	12.2	11.6	11.2
NI			0	0	0	0	0	0	0
P			.08	0	.18	.12	.14	.24	.17
PB	<.01		0	.02	0	0	0	.02	0
SB			0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0
SI	<10-60		15.2	2.3	12.5	11.9	9.6	12.2	11.4
SN			0	0	0	0	0	0	0
SR			.299	.044	.0991	.084	.088	.084	.085
TI			0	.022	.0065	0	0	0	0
V			0	0	0	0	0	0	0
ZN	<.005		0	.002	0	0	0	.002	0

WATER QUALITY VALUES FOR CHRISTIAN
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	NOV30/81 CHRISTN BRIDGE	DEC01/81 NORTH SEEPAGE	DEC02/81 MIDDLE SEEPAGE	MAR21/83 CHRISTN CREEK	NOV30/81 TEST WELL	DEC01/81 PRODUC. WELL	DEC02/81 PRODUC. WELL	DEC02/81 PRODUC. WELL	MAR21/83 NEW	MAR21/83 WELL	APR06/83 NEW	APR06/83 WELL
ALK.TOT	20-300		173	169	175	208	218	176	245	230	210		195	
AMMON.	<.002	>.08	.016	0	0	.018	.206	.017	.145	.15	.248		.005	
CO2	2-5	>20												
CHLOR.	<170	>600	1.01	1.68	1.63	1.9	1.63	1.39	2.2	2.47	1.3		1.3	
COLOR	<15			0	0			5	5	5				
COND.FLD	150-2000		158	192	185		250		230	260				
COND.LAB	**		423	348	367	461	515	421	510	515	467		413	
DO-PPM	>6-8	<4		10	9.8				1.8	1.8				
DO-%SAT	100%			92.8	90.6				17.2	17.1				
DGAS.TOT	<103%	>110%	101.1	101.2			103.8	112.4	113.2					
DGAS.NIT	100%			103.4					138.7					
HARDNESS	20-400		213	180	182	240	252	209	242	240	238		210	
H2S	<.002	>.004												
NITRITE	<.012	.2	0	.0053	0	0	0	0	0	.011	.017		0	
NITRATE	<.12		.091	.644	.143	.11	.051	.136	.071	.294	.1		.12	
PH-FLD	6.8-8.5	<5,>9	7.5	7.9	7.9		7.6	7.6	7.7	7.7				
PH-LAB	**	**	8.2	8.3	8.3	8.2	7.9	8.1	8	8.9	7.8		7.6	
PHOSPH.	<.05		.0092	.0128	.0259	.024	.0086	.0125	.0109	.0111	.01		.019	
RESID.TOT	<2000													
RESID.FIL	70-400		269	221	219	294	317	311	308	307	296		258	
RESID.N.F	<3		0	0	0	19	0	0	0	0	0		0	
SALIN.			0	0	0		0	0	0	0				
SILICA	<10-60		6.66	5.63	5.94	7.1	7.31	7.14	7.11	7.12	7.3		7.2	
SULFATE	<90		44.8	15.9	18.4	38.8	50.2	49	47.2	47.3	37.2		21.5	
TASTE	OK		OK	OK	OK		BAD	BAD	BAD	BAD				
T.D.SOL	500-1000	15000												
TEMP.	4-18C	<2,>25	1.2	8.3	7.8		8.8	8.8	8.9	8.9				
TURBID	1-60	>1000	0	0	0	4.6	2.6	3.6	3.4	3.5	1.3		1.5	
METALS---														
AL	<.1	>5	0	0	0		0	0	0					
AS	<.5	>1	0	0	0	0	0	0	0	0	0		0	
BA	<1		.034	.0265	.0279	.034	.0637	.0546	.0596	.0593	.052		.041	
CA	4-150	>300	69.8	63.8	63.9	77.9	78.9	62.4	76.7	75.9	75.4		71.5	
CD	<.0004		0	0	0	0	0	0	0	0	0		0	
CO			0	0	0	0	0	0	0	0	0		0	
CR	<.01		0	0	.197	0	0	0	.0707	0	0		0	
CU	<.006		0	0	0	0	0	0	0	0	0		0	
FE	<.3		.144	0	0	.23	.406	0	.321	.318	.248		.108	
HG	<.00005	>.0002	0	0	0	0	.055	0	0	0	0			
K		>50				3.22					2.76		1.95	
MG	<10	>100	9.29	4.91	5.51	10.6	13.4	13	12.3	12.3	11.6		7.6	
MN	<.05	>15	.0319	0	0	.051	.468	.0811	.411	.408	.358		.003	
MO			0	0	0	0	0	.023	0	0	0		0	
NA		>500	3.21	2.13	1.97	3.7	6.62	6.34	5.32	5.31	5.3		3.8	
NI			0	0	0	0	0	0	0	0	0		0	
P			0	0	0	.06	0	0	0	0	0		0	
PB	<.01		0	0	0	0	0	.0017	0	0	0		0	
SB			0	0	0	0	0	0	0	0	0		0	
SE		>2.5	0	0	0	0	0	0	0	0	0		0	
SI	<10-60		6.99	6.05	6.37	6.9	7.65	7.61	7.42	7.35	7.2		6.9	
SN			.382	0	0	.01	0	0	0	0	0		0	
SR			0	.225	.227	.405	.536	.509	.504	.503	.471		.332	
TI			0	0	0	.002	0	0	0	0	0		0	
V			0	0	0	0	0	0	0	0	0		0	
ZN	<.005		0	.0068	0	0	0	0	0	.0011	0		0	

WATER QUALITY VALUES FOR CLEAR
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	NOV20/78 CLEAR CREEK	JAN11/79 CLEAR CREEK	FEB12/79 CLEAR CREEK	APR19/79 CLEAR CREEK	MAY15/79 CLEAR CREEK	JUL17/79 CLEAR CREEK	AUG30/79 CLEAR CREEK	NOV26/79 CLEAR CREEK	APR15/80 CLEAR CREEK	JUL15/80 CLEAR CREEK
ALK.TOT	20-300		30	29.3	32	39	30	22.5	33	35.2	36	26.1
AMMON.	<.002	>.08	0	0	.007	0	0	0	.007	0	0	.006
CO2	2-5	>20										
CHLOR.	<170	>400	0	0	0	0	0	0	0	0	.62	0
COLOR	<15									0	15	
COND.FLD	150-2000											
COND.LAB	**		81	78.5	80	90	75.4	60	96.5	99.5	92	71
DO-PPM	>6-8	<4	13	13			12					
DO-%SAT	100%		93	92			97					
DGAS.TOT	<103%	>110%										
DGAS.HIT	100%											
HARDNESS	20-400		37	35.5	37.9	39.5	33.6	28.5	43.6	44.8	40	30.3
H2S	<.002	>.004										
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.075	.077	.069	.091	.121	.011	.036	.098	.266	.031
PH-FLD	6.8-8.5	<5,>9					7.5		7		7.5	7.5
PH-LAB	**	**	6.9	7.2	7.4	7.7	7.7	7.5	7.7	7.5	7.6	7.5
PHOSPH.	<.05		0	0	0	0	0	.009	0	0	.0075	.009
RESID.TOT	<2000											
RESID.FIL	70-400		55	52	51	65	55	41	63	66	67	52
RESID.N.F	<3		0	0	0	0	0	11	0	0	6	0
SALIN.												
SILICA	<10-60		2.35	2.78	2.8	2.2	1.4	2.15	2.6	2.64	1.72	
SULFATE	<90		8.7	8	8.3	6.9	5.5	6.4	12.8	10.9	7.7	8.8
TASTE	OK											
T.D.SOL	500-1000	15000										
TEMP.	4-18C	<2,>25	.5	.3	1	5	5	11	10.5	2.5	4.5	8.5
TURBID	1-60	>1000	2.1	0		3.2	2.3	3	0	0	2.7	2.6
METALS---												
AL	<.1	>5	0	0	0	.1	0	.14	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0
BA	<1		0	0	0	0	.004	.004	.0044	.0042	.0059	.0113
CA	4-150	>300	13.1	12.3	13.2	14.1	12	10	15.2	15.6	15.2	10.7
CD	<.0004		0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	0	0	0
FE	<.3		0	.104	.112	.093	.093	.195	.036	.085	.068	0
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	.00056
K		>50	.099	.176	.165	.199	.17	.156	.153	.186	.13	0
MG	<10	>100	1.13	1.17	1.2	1.03	.88	1.36	1.41	.5	.881	0
MN	<.05	>15	.0045	.0147	.016	.019	.0074	.011	.0057	.0047	.005	.0041
MO			0	0	0	0	0	0	0	0	0	0
NA		>500	.99	1.23	1.38	1.47	1	.82	1.28	1.71	1.61	.91
NI			0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0
SI	<10-60		2.2	2.73	2.7	2.5	2.2	1.8	2.24	1.86	2.49	1.72
SN			0	0	0	0	0	0	0	0	0	0
SR			.074	.0731	.074	.083	.073	.058	.09	.0899	.0856	.0643
TI			0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	0	0	0	0	0	0	0	.0014	.0043

WATER QUALITY VALUES FOR CLEARWATER
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUN22/81 CLEARW RIVER	MAY04/82 CLEARW RIVER	JUN02/82 CLEARW RIVER	JUL06/82 CLEARW RIVER	JUL29/82 CLEARW RIVER	NOV24/82 CLEARW RIVER	NOV27/82 CLEARW RIVER
ALK.TOT	20-300		38.7	36.5	32	30	32.5	38	39
AMMON.	<.002	>.08	.0081	0	.005	0	0	0	.007
CO2	2-5	>20							
CHLOR.	<170	>400	0	.6	0	0	0	0	0
COLOR	<15			15					
COND.FLD	150-2000							35	38
COND.LAB	**		88.1	89	76.7	71	78.2	88	85.9
DO-PPM	>6-8	<4						14	13.6
DO-%SAT	100%								
DGAS.TOT	<103%	>110%						130.6	104.1
DGAS.WIT	100%								
HARDNESS	20-400		38.5	41	35.8	32.8	35.1	40.5	39.7
H2S	<.002	>.004							
NITRITE	<.012	.2	0	.007	.007	0	.007	0	0
NITRATE	<.12		.117	.08	.09	.11	.13	.19	.174
PH-FLD	6.8-8.5	<5,>9		6.35					
PH-LAB	**	**	7.9	7.8	7.6	7.8	7.4	7.7	7.9
PHOSPH.	<.05		0	.008	.008	.009	.253	0	.01
RESID.TOT	<2000								
RESID.FIL	70-400		60	70	55	47	65	62	62
RESID.N.F	<3		0	0	0	0	0	0	0
SALIN.									
SILICA	<10-60		2.51	3.3	2.4	1.9	1.8	2.3	2
SULFATE	<90		5.5	5.9	5.2	6.1	5.1	4.7	5.2
TASTE	OK								
T.D.SOL	500-1000	15000							
TEMP.	4-18C	<2,>25		4				1.4	2.3
TURBID	1-60	>1000	0	.3	1.6	2.1	.8	0	0
METALS—									
AL	<.1	>5	0	.06	.07	.1	.08	0	0
AS	<.5	>1	0	0	0	0	0	0	0
BA	<1		.0059	.006	.005	.005	.005	.005	.005
CA	4-150	>300	11.4	11.6	10.8	10.5	11	12.3	12
CD	<.0004		0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0
CR	<.01		0	0	0	.015	.01	.011	0
CU	<.006		0	0	0	0	0	0	0
FE	<.3		.0257	.127	.129	.133	.092	.038	.04
HG	<.00005	>.0002	0	0	0	0	0	0	0
K		>50	.648	.63	.59	.45	.3	1.39	.62
MG	<10	>100	2.44	2.8	2	1.4	1.7	2.1	2.1
MN	<.05	>15	0	.004	.005	.005	.004	.001	.002
MO			0	0	0	0	0	0	0
NA		>500	1.75	1.7	1.4	.9	1.1	1.5	1.3
NI			0	0	0	0	0	0	0
P			0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0
SI	<10-50		2.42	3.1	2.4	1.9	1.9	2.3	2.3
SN			0	0	0	0	.01	0	0
SR			.0703	.077	.067	.066	.07	.078	.075
TI			.0059	0	.003	.055	.003	0	0
V			0	0	0	0	0	0	0
ZN	<.005		0	0	0	0	0	.003	0
							.003	.003	.006

WATER QUALITY VALUES FOR CLEARWATER
(BELOW DETECTION LIMITS=0)

						PUMP TEST				
			NOV23/82	NOV24/82	NOV25/82	NOV26/82	NOV27/82	NOV28/82	NOV29/82	NOV30/82
			2.5 HR	25 HR	48 HR	2 HR	25 HR	46 HR	73 HR	92 HR
PARAM.	RECOMM.	TOXIC	TWC-2	TWC-2	TWC-2	TWC-1	TWC-1	TWC-1	TWC-1	TWC-1
ALK.TOT	20-300		65.5	77	76	99	99	99	98	98
AMMON.	<.002	>.08				.007	.006			
CO2	2-5	>20								
CHLOR.	<170	>400	4.2	5.1	4.8	8.8	7.2	7.2	3.9	4.2
COLOR	<15									
COND.FLD	150-2000		93	105	108	148	147	149	148	147
COND.LAB	**		168	183	192	248	248	241	238	238
DO-PPM	>6-8	<4	5.5	5.8	5.6	4.8	4.8	4.8	4.7	4.7
DO-%SAT	100%									
DGAS.TOT	<103%	>110%	100.8	101.5	101.7	101.9	102.9	103.4	103.9	104
DGAS.HIT	100%									
HARDNESS	20-400		72.4	80.7	82	108	106	105	103	103
H2S	<.002	>.004								
NITRITE	<.012	.2								
NITRATE	<.12		1.52	1.79	.03	2.97	2.76	2.67	2.38	2.33
PH-FLD	6.8-8.5	<5,>9	+70	+100	+110	+70	+90	+90	+100	+100
PH-LAB	**	**	7.2	7.2	7.2	7.45	7.8	8.1	7.8	7.9
PHOSPH.	<.05		7.3	7.5	7.6	8.2	8.2	8.2	8.2	8.2
RESID.TOT	<2000		.011	.01	.015	.261	.967	.037		
RESID.FIL	70-400									
RESID.N.F	<3		105	119	123	168	156	154	155	149
SALIN.										
SILICA	<10-60									
SULFAT2	<90		7.1	7.1	6.6	6.8	7.2	7.2	7.2	7.2
TASTE	OK		5.8	6.8	6.4	9.1	9.6	9.2	9.1	8.7
T.D.SOL	500-1000	15000								
TEMP.	4-18C	<2,>25								
TURBID	1-60	>1000	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
METALS--										
AL	<.1	>5								
AS	<.5	>1								
BA	<1									
CA	4-150	>300	.002	.002	.003	.001			.001	.001
CD	<.0004		21.3	23.5	24	31.2	30.7	30.1	29.8	29.6
CO										
CR	<.01									
CU	<.006									
FE	<.3									
HG	<.00005	>.0002	.011	.007	.028	.014	.005			
K		>50								
MG	<10	>100	1.3	1.39	1.63	2.35	2.31	2.35	2.32	2.32
MN	<.05	>15	4.6	5.1	5.3	7.3	7.2	7.1	7	7
MO			.002		.002					
NA		>500								
NI			3.4	4	3.99	6.4	6.3	6.2	6.6	6.6
P										
PB	<.01					.08	.08	.09	.08	
SB			0							
SE		>2.5								
SI	<10-60									
SR			6.5	6.6	6.6	7	7	6.9	7	7
SR										
TI			.134	.148	.149	.187	.183	.075	.178	.177
V										
ZN	<.005									

WATER QUALITY VALUES FOR CLEARWATER
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	FEB06/82 MIKES WELL	APR27/82 MIKES WELL	SEP01/82 MIKES WELL	OCT21/82 MIKES WELL	FEB10/83 MIKES WELL
ALK.TOT	20-300		120	86	126	128	130
ARSEN.	<.002	>.08	.008	.005	0	.007	0
CO2	2-5	>20					
CHLOR.	<170	>600	6	5.1	8.5	6.4	8.5
COLOR	<15		0	0			
COND.FLD	150-2000						
COND.LAB	**		260	217	272	269	287
DO-PPM	>6-8	<4					
DO-SAT	100%						
DGAS.TOT	<103%	>110%					
DGAS.HIT	100%						
HARDNESS	20-400		117	90.1	120	114	124
H2S	<.002	>.004					
NITRITE	<.012	.2	0	.006	0	0	0
NITRATE	<.12		.608	1.55	.58	.46	.67
PH-FLD	6.8-8.5	<5,>9					
PH-LAB	**	**	7.7	7.7	7.6	7.7	7.6
PHOSPH.	<.05		.016	.023	.032	.033	.036
RESID.TOT	<2000						
RESID.FIL	70-400		160	140	166	171	179
RESID.N.F	<3		0	0	0	0	6
SALIN.							
SILICA	<10-60		9.4	9.2	9.1	6.5	8.5
SULFATE	<90		5.2	5.6	4.7	2.6	3
TASTE	OK						
T.D.SOL	500-1000	15000					
TEMP.	4-10C	<2,>25					
TURBID	1-60	>1000	0	1.2	.1	.2	.5
METALS—							
AL	<.1	>5	.06	.11	0	0	.09
AS	<.5	>1	0	0	0	0	0
BA	<1		.007	.006	.007	.007	.008
CA	4-150	>300	31.1	23.3	32.6	30.8	33.1
CD	<.0004		0	0	0	0	.0005
CO			0	0	0	0	0
CR	<.01		0	0	0	0	0
CU	<.006		.001	.001	0	0	.001
FE	<.3		.095	.152	.068	.078	.119
HG	<.00005	>.0002	0	0	0	0	0
K		>50	2.94	2.65	3.19	3.66	3.46
MG	<10	>100	9.3	7.5	9.3	8.8	9.9
MN	<.05	>15	.006	.018	.021	.01	.028
MO			0	0	0	0	0
NA		>500	7.3	6.9	8.3	8.1	8.4
NI			0	0	0	0	0
P			0	0	0	.09	0
PB	<.01		0	0	0	0	0
SB			0	0	0	0	0
SE		>2.5	0	0	0	0	0
SI	<10-60		9.4	9.4	8.7	8.6	8.4
SN			0	0	0	.02	0
SR			.144	.122	.171	.164	.188
TI			0	.012	0	0	.008
V			0	.01	0	0	0
ZN	<.005		.04	.016	.004	.013	.005

WATER QUALITY VALUES FOR CRAZY
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	AUG22/79 CRAZY CREEK	NOV29/79 CRAZY CREEK	MAR18/80 CRAZY CREEK	APR17/80 CRAZY CREEK	JUL21/80 CRAZY CREEK	JUL25/82 CRAZY CREEK	AUG22/82 CRAZY CREEK	SEP13/82 CRAZY CREEK	OCT15/82 CRAZY CREEK
ALK.TOT	20-300		22.9	24.3	20.9	14.5	17	15	18.5	17	21
AMMON.	<.002	>.08	0	0	0	0	0	0	0	0	0
CO2	2-5	>20									
CHLOR.	<170	>400	0	.5	0	0	0	0	0	.6	0
COLOR	<15		0	0	0	15					
COND.FLD	150-2000				40						
COND.LAB	"		61.2	64.9	56.2	37.4	43.7	37	45.8	40.4	48.1
DO-PPM	>6-8	<4			13						
DO-%SAT	100%				98.5						
DGAS.TOT	<103%	>110%			102.6						
DGAS.NIT	100%				103.7						
HARDNESS	20-400		16.9	28.4	26	18.5	19.4	16.1	19.1	17.6	20.6
H2S	<.002	>.004									
NITRITE	<.012	.2	0	0	0	0	0	.006	0	0	0
NITRATE	<.12		.119	.208	.179	.209	.0776	.09	.17	.09	.12
PH-FLD	6.8-8.5	<5,>9			6.8						
PH-LAB	"	"	7.5	7.4	7.3	7.1	7.1		7.6	7.2	7.5
PHOSPH.	<.05		0	0	0	0	0	0	.005	0	0
RESID.TOT	<2000										
RESID.FIL	70-400		47	28.4	44	33	35	30	32	41	43
RESID.N.F	<3		0		0	0	0	5	0	0	6
SALIN.					0						
SILICA	<10-60		2.9	3.6	3.33	3.1	2.55	2.2	2.8	2.7	2.4
SULFATE	<90		5.18	6.95	5.25	3.9	3.6	3.2	5.1	4	4.8
TASTE	OK										
T.D.SOL	500-1000	15000									
TEMP.	4-18C	<2,>25									
TURBID	1-60	>1000	0	0	0	1.6	1	0	0	0	0
METALS--											
AL	<.1	>5	0	0	0	.159	0	.06	.05	.06	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0
BA	<1		.0037	.0141	.0136	.0065	.015	.01	0	.011	.012
CA	4-150	>300	5.94	8.32	7.76	5.71	6	4.9	6	5.2	6.3
CD	<.0004		0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	0	0
FE	<.3		.018	0	.012	.095	.019	.025	.018	.042	.01
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0
K		>50	1.1	.963	.852	.716	.757		.83	.74	.89
MG	<10	>100	.492	1.85	1.62	1.04	1.08	.9	1	1	1.2
MN	<.05	>15	0	0	0	0	0	0	0	.005	.001
MO			0	0	0	0	0	0	0	.005	0
NA		>500	1.1	1.28	1.02	.635	.694	.5	0	.7	.8
NI			0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0
SI	<10-60		2.41	2.81	3.5	3.03	2.53	2.4	2.5	2.3	2.6
SR			0	0	0	0	0	0	0	0	0
SR			.0372	.0392	.0369	.0232	.0258	.021	.027	.023	.028
TI			0	0	0	0	0	0	0	.002	0
V			0	0	0	0	0	0	0	0	0
ZN	<.005		0	0	0	0	0	0	0	0	0

WATER QUALITY VALUES FOR DALA
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUL16/80 DALA RIVER	MAR11/81 DALA RIVER	APR04/81 DALA RIVER	MAY09/81 DALA RIVER	JUN12/81 DALA RIVER	JUL30/81 DALA RIVER
ALK.TOT	20-300		13.1	13.5	19	15.2	13.8	11.1
AMMON.	<.002	>.08	0	.031	0	0	.0138	.0095
CO2	2-5	>20						
CHLOR.	<170	>400	0	.648	.53	0	0	0
COLOR	<15							
COND.FLD	150-2000							
COND.LAB	"		30.2	50	47	38.6	30.8	27.5
DO-PPM	>6-8	<4						
DO-%SAT	100%							
DGAS.TOT	<103%	>110%						
DGAS.NIT	100%							
HARDNESS	20-400		12.5	16.6	19.4	15.7	11.8	10.5
H2S	<.002	>.004						
NITRITE	<.012	.2	0	0	0	0	0	0
NITRATE	<.12		.0547	.321	.139	.25	.0907	.174
PH-FLD	6.8-8.5	<5,>9					7	
PH-LAB	"	"	7.2	6.8	7.4	7.4	7.4	7.1
PHOSPH.	<.05		.0094	.0058	.006	.0077	.0062	0
RESID.TOT	<2000							
RESID.FIL	70-400		25	40.5	39	29	26	19
RESID.N.F	<3		0	0	0	13	7	0
SALIN.								
SILICA	<10-60		1.13	2.53	1.57	1.57	1.31	.92
SULFATE	<90		2.3	6.5	4.85	2.75	2.2	2.3
TASTE	OK							
T.D.SOL	500-1000	15000						
TEMP.	4-18C	<2,>25					7.6	
TURBID	1-40	>1000	2.5	2.6	1.5	0	0	1.1
METALS--								
AL	<.1	>5	.178	0	.108	.247	0	.092
AS	<.5	>1	0	0	0	0	0	0
BA	<1		.0243	.0325	.0187	.0149	.0104	.01
CA	4-150	>300	0	5.59	6.5	5.18	4.05	3.61
CD	<.0004		0	0	0	0	0	0
CO			0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0
CU	<.006		0	.0018	.0012	0	.0019	0
FE	<.3		.153	.251	.124	.313	.0428	.0863
HG	<.00005	>.0002	.00081	0	0	0	0	0
K		>50	.484	.929	.504	.475	.468	.403
MG	<10	>100	.351	.638	.77	.66	.41	.37
MN	<.05	>15	.0043	.0168	.0044	.0092	0	.003
MO			0	0	0	0	0	0
NA		>500	.372	1.08	.87	.72	.54	0
NI			0	0	0	0	0	0
P			0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0
SB			0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0
SI	<10-60		1.28	2.6	1.84	1.74	1.18	.97
SN			0	0	0	0	0	0
SR			.0147	.035	.0404	.0256	.0207	.0166
TI			.0118	0	.0042	.0164	0	.0134
V			0	0	0	0	0	0
ZN	<.005		0	.0042	.0014	.0013	.002	0

WATER QUALITY VALUES FOR DEVEREUX
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	SEP08/81 DEVEREUX @ LAKE	OCT20/81 DEVEREUX @ LAKE	FEB03/83 DEVEREUX @ LAKE	FEB03/83 HIGH LAKE
ALK.TOT	20-300		16.9	19.3	20	8
AMMON.	<.002	>.08	.012	.015	0	0
CO2	2-5	>20				
CHLOR.	<170	>600	0	.58	0	0
COLOR	<15					
COND.FLD	150-2000					
COND.LAB	"		67	76.5	74.6	27.8
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.HIT	100%					
HARDNESS	20-400		26.5	30	30.2	11.2
H2S	<.002	>.004				
NITRITE	<.012	.2	0	0	0	0
NITRATE	<.13		.034	.07	.08	.02
PH-FLD	6.8-8.5	<5,>9			7.25	6.5
PH-LAB	"	"	7.4	7.5	7.1	6.5
PHOSPH.	<.05		.0075	.0065	.006	.006
RESID.TOT	<2000					
RESID.FIL	70-400		46	53	51	30
RESID.N.F	<3		0	0	0	0
SALIN.						
SILICA	<10-60		1.94	2.13	2.7	2.5
SULFATE	<90		13.6	15.6	13.7	5.4
TASTE	OK				OK	OK
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25			1.5	3
TURBID	1-60	>1000	1.2	0	.2	0
METALS--						
AL	<.1	>5	.099	0	.06	.09
AS	<.5	>1	0	0	0	0
BA	<1		.0239	.0178	.021	.01
CA	4-150	>300	9.46	11	10.6	3.3
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	.162	0	0
CU	<.006		0	0	0	0
FE	<.3		.166	.0543	.09	.13
HG	<.00005	>.0002	0	0	0	0
K		>50	.97	.998	1.13	.56
MG	<10	>100	.7	.62	.8	.5
MN	<.05	>15	.0056	0	.006	.008
MO			0	0	0	0
NA		>500	.88	.91	1	.7
NI			0	0	0	0
P			0	0	0	0
PB	<.01		0	0	0	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		2.01	1.93	2.4	2.3
SN			0	0	0	0
SR			.0523	.0443	.06	.019
TI			.0191	0	0	0
V			0	0	0	0
ZN	<.005		.0032	.0046	0	0

WATER QUALITY VALUES FOR DRY
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	NOV20/78 UPPER SPRING	JAN11/79 UPPER SPRING	FEB12/79 UPPER SPRING	APR19/79 UPPER SPRING	MAY15/79 UPPER SPRING	JUL17/79 UPPER SPRING	AUG30/79 UPPER SPRING	NOV26/79 UPPER SPRING	APR15/80 UPPER SPRING	JUL15/80 UPPER SPRING
ALK.TOT	20-300		38	34.9	34.1	37	37	35.1	31.4	34.7	35.5	32.7
AMMON.	<.002	>.08	0	0	0	0	0	0	0	0	0	0
CO2	3-5	>30										
CHLOR.	<170	>400	0	0	0	0	0	0	0	0	.65	0
COLOR	<15									0	90	
COND.FLD	150-2000											
COND.LAB	**		95	88	90	93.9	92.8	85.5	81.3	99.5	95.8	81
DO-PPM	>6-8	<4	9	10.3			10					8.5
DO-%SAT	100%		74.4	85.1			79					65.6
DGAS.TOT	<103%	>110%	102									
DGAS.HIT	100%		110.3									
HARDNESS	20-400		43		47.6	40.2	41.2	37.8	37.2	41.3	40	34.8
H2S	<.002	>.004										
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	.0089	0
NITRATE	<.12		.078		.083	.085	.105		.036	.088	.129	.101
PH-FLD	6.8-8.5	<5,>9							7		7	7
PH-LAB	**	**	6.8	7.1	7.3	7.2	7.2	7.3	7.1	7.3	7.2	7.1
PHOSPH.	<.05		0	0	0	0	0	0	0	0	0	0
RESID.TOT	<2000											
RESID.FIL	70-600		63	59	59	64	64	57	53	62	65	55
RESID.N.F	<3		0	0	0	0	0	0	0	0	0	0
SALIN.												
SILICA	<10-60		2.54	2.55	2.55		2.45	2.58	2.5	2.78	2.48	2.29
SULFATE	<90		8.5	9.05	9.55	8.96	7.65	6.22	8.18	11.2	9.6	7.3
TASTE	OK											
T.D.SOL	500-1000	15000										
TEMP.	4-18C	<2,>25	6	6	5.2	4	4	4	4.5	6.5	4.5	4.5
TURBID	1-60	>1000	0	0	0	0	0	0	0	0	0	0
METALS--												
AL	<.1	>5	0	0	0	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0
BA	<1		0	0	0	0	0	0	0	.0013	.0038	.0113
CA	4-150	>300	15	14.4	15.5	14.4	14.7	13.3	13.1	14.5	14.4	10.7
CD	<.0004		0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	.0032	0	0	0
FE	<.3		0	0	0	0	0	0	0	0	0	0
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	.00068
K		>50	.152	.145	.136	.136	.137	.123	.133	.156	.146	.123
MG	<10	>100	1.23	1.22	1.28	1.08	1.08	1.11	1.09	1.23	.98	.881
MN	<.05	>15	0	0	0	0	0	0	0	0	0	0
MO			0	0	0	0	0	0	0	0	0	0
NA		>500	1.2	1.17	1.23	1.24	1.19	1.35	1.48	1.66	1.43	.91
NI			0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0
SI	<10-60		2.2	2.51	2.34	2.13	2.45	2.43	2.47	1.97	2.26	2.16
SN			0	0	0	0	0	0	0	0	0	0
SR			.085	.081	.074	.083	.088	.078	.078	.0284	.088	.0753
TI			0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	0	0	0	0	0	0	0	0	0

WATER QUALITY VALUES FOR DRY CREEK
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	FEB12/79 LOWER SPRING	APR19/79 LOWER SPRING	MAY15/79 LOWER SPRING	JUL17/79 LOWER SPRING	AUG30/79 LOWER SPRING
ALK.TOT	20-300		39.3	36.7	38.3	43.4	36.8
AMMON.	<.002	>.08	0	0	0	0	0
CO2	2-5	>20					
CHLOR.	<170	>400	0	0	0	0	0
COLOR	<15						
COND.FLD	150-2000						
COND.LAB	""		98	94.5	97.2	165	89
DO-PPM	>6-8	<4			10		
DO-%SAT	100%				82		
DGAS.TOT	<103%	>110%					
DGAS.NIT	100%						
HARDNESS	20-400		47.6	40.9	42.9	46.6	41.4
H2S	<.002	>.004					
NITRITE	<.012	.2	0	0	0	0	0
NITRATE	<.12		.078	.0808	.087	.078	.0695
PH-FLD	6.8-8.5	<5,>9					
PH-LAB	""	""	7.3	7.3	7	7.3	7.2
PHOSPH.	<.05		0	0	0	0	0
RESID.TOT	<2000		66	61	64		
RESID.FIL	70-400		63	61	61	68	58
RESID.N.F	<3		0	0	0	0	0
SALIN.							
SILICA	<10-60		2.8		2.7	2.58	2.55
SULFATE	<90		8.7	9.55	8	7.55	6.95
TASTE	OK						
T.D.SOV.	500-1000	15000					
TEMP.	4-18C	<2,>25	5.8	5	5	5	4.5
TURBID	1-60	>1000		0	0	0	0
METALS—							
AL	<.1	>5	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0
BA	<1		0	0	0	0	0
CA	4-150	>300	16.9	14.7	15.4	16.5	14.6
CD	<.0004		0	0	0	0	0
CO			0	0	0	0	0
CR	<.01		0	0	0	0	0
CU	<.006		0	0	0	0	0
FE	<.3		0	0	0	0	0
HG	<.00005	>.0002	0	0	0	0	0
K		>50	.161	.133	.147	.155	.141
MG	<10	>100	1.3	1.01	1.08	1.31	1019
MN	<.05	>15	0	0	0	0	0
MO			0	0	0	0	0
NA		>500	1.33	1.35	1.34	1.58	1.5
NI			0	0	0	0	0
P			0	0		0	0
PB	<.01		0	0	0	0	0
SB			0	0	0	0	0
SE		>2.5	0	0	0	0	0
SI	<10-60		2.56	2.3	2.7	2.71	2.54
SN			0			0	0
SR			.081	.085	0	.095	.0843
TI			0	0	0	0	0
V			0	0	0	0	0
ZN	<.005		0	0	0	0	0

WATER QUALITY VALUES FOR DRY CREEK
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	NOV20/78 AT ROAD SIDE	JAN11/79 AT ROAD SIDE	FEB12/79 AT ROAD SIDE	APR19/79 AT ROAD SIDE	MAY15/79 AT ROAD SIDE	JUL17/79 AT ROAD SIDE
ALK.TOT	20-300		101	36.8	36.7	37.2	38.6	40.8
AMMON.	<.002	>.08	0		0	0	0	0
CO2	2-5	>20						
CHLOR.	<170	>400	0	0	0	0	0	0
COLOR	<15							
COND.FLD	150-2000							
COND.LAB	**		220	93.5	94.2	94.6	95.8	98
DO-PPM	>6-8	<4	11	12			11	
DO-%SAT	100%			94.5			89	
DGAS.TOT	<103%	>110%						
DGAS.WIT	100%							
HARDNESS	20-400		107	42.6	44.9	41.1	41.7	44.7
H2S	<.002	>.004						
NITRITE	<.012	.2	0	0	0	0	0	0
NITRATE	<.12		.015	.082	.082	.075	.094	.078
PH-FLD	6.8-8.5	<5,>9	>9					
PH-LAB	**	**		7.4	7.5	7.5	7.5	7.5
PHOSPH.	<.05		0	0	0	0	0	0
RESID.TOT	<2000			66	61	67	62	
RESID.FIL	70-400		134	62	62	62	62	61
RESID.N.F	<3		0	0	0	0	0	0
SALIN.								
SILICA	<10-60		4.25	2.61	2.69		2.53	2.45
SULFATE	<90		8.5	9.45	9.3	8.9	7.9	6.7
TASTE	OK		OK					
T.D.SOL	500-1000	15000						
TEMP.	4-18C	<2,>25	2.5	4	4	4	5	6
TURBID	1-60	>1000	1.5	0		0	0	0
METALS--								
AL	<.1	>5	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0
BA	<1		.0037	0	0	0	0	.003
CA	4-150	>300	38.2	15	15.9	14.8	14.9	15.8
CD	<.0004		0	0	0	0	0	.001
CO			0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0
FE	<.3		0	.041	0	0	0	.035
HG	<.00005	>.0002	0	0	0	0	0	0
K		>50	.443	.069	.145	.141	.139	.157
MG	<10	>100	2.82	1.25	1.27	1.01	1.09	1.27
MN	<.05	>15	0	0	0	0	0	0
MO			0	0	0	0	0	0
NA		>500	2.15	1.28	1.32	1.35	1.2	1.6
NI			0	0	0	0	0	0
P			0	0	0	0		0
PB	<.01		0	0	0	0	0	0
SB			0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0
SI	<10-60		3.7	2.59	2.45	2.27	2.53	2.7
SN			0	0			0	0
SR			0	.0828	.08	.08	.09	.09
TI			0	0	0	0	0	0
V			0	0	0	0	0	0
ZN	<.005		0	0	0	0	0	0

WATER QUALITY VALUES FOR DUTCH
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	APR27/82 DUTCH LAKE	NOV25/82 DUTCH LAKE 2M	NOV25/82 DUTCH LAKE 14M	NOV25/82 DUTCH LAKE 28M	FEB10/83 DUTCH LAKE 5M	FEB10/83 DUTCH LAKE 10M	SEP15/83 DUTCH LAKE 0M	SEP15/83 DUTCH LAKE 5M	SEP15/83 DUTCH LAKE 10M	SEP15/83 DUTCH LAKE 15M	SEP15/83 DUTCH LAKE 10M	SEP15/83 DUTCH LAKE 15M
ALK.TOT	20-300		93	106	106	134	108	162	93	94	104	105	104	105
AMMON.	<.002	>.08	.21	.28	.255	5.35	.268	7.6	.008	.01	.356	.448	.356	.448
CO2	2-5	>20												
CHLOR.	<170	>400	.9	1.2	.5	3.1	1.1	1.2	1.2	.9	.9	1	.9	1
COLOR	<15		0											
COND.FLD	150-2000								255	410	400	135	400	135
COND.LAB	**		195.3	205	206	268	209	343	184	182	206	206	206	206
DO-PPM	>6-8	<4							7	8.1	2.2	.8	2.2	.8
DO-%SAT	100%								84.3	97.6	22.7	7.3	22.7	7.3
DGAS.TOT	<103%	>110%												
DGAS.NIT	100%													
HARDNESS	20-400		85.6	91.5	91.3	134	90.7	157	83.9	85.4	95.5	94.4	95.5	94.4
H2S	<.002	>.004												
NITRITE	<.012	.2	.005	0	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.12	.04	.04	.04	.02	.09	.04	0	.03	.01	.03	.01
PH-FLD	6.8-8.5	<5,>9							7.2	7.2				
PH-LAB	**	**	7.6	7.6	7.6	6.9	7.6	6.7	8.3	8.4	7.7	7.4	7.7	7.4
PHOSPH.	<.05		.009	.011	.029	.63	0	1.7	.134	.014	.021	.05	.021	.05
RESID.TOT	<2000													
RESID.FIL	70-400		119	133	125	135	139	230	125	129	125	128	125	128
RESID.N.F	<3		0	0	0	38								
SALIN.				0	0	0								
SILICA	<10-60		.9	0	0	5.4	.8	7.9	.3	.3	.4	.9	.4	.9
SULFATE	<90		2	0	1.1	0	1.3	1.2	2.7	2.1	2.2	2.4	2.2	2.4
TASTE	OK													
T.D.SOL	500-1000	15000												
TEMP.	4-18C	<2,>25							17	17	10	5.2	10	5.2
TURBID	1-60	>1000	.2	.8	.8	75	0	125						
METALS--														
AL	<.1	>5	0	0	0	0	0	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0	0
BA	<1		.008	.008	.008	.026	.008	.043	.006	.007	.008	.009	.008	.009
CA	4-150	>300	21.8	23.5	23.5	26.9	23.5	28	20.6	20.8	24.2	23.8	24.2	23.8
CD	<.0004		0	0	0	0	0	0	0	.005	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	.011	0	0	0	.021	0	0	0	0
CU	<.006		0	0	0	0	0	0	.001	.01	.002	.001	.002	.001
FE	<.3		.067	.196	.195	17.3	.025	28.3	.03	.049	.092	.112	.092	.412
HG	<.00005	>.0002	0	0	0	0	0	.0014	0	0	0	0	0	0
K		>50	2.22	2.63	2.58	2.87	2.72	3.2	2.96	2.61	2.72	2.75	2.72	2.75
MG	<10	>100	7.5	7.8	7.8	8.2	7.8	8.3	7.8	8	8.4	8.3	8.4	8.3
MN	<.05	>15	.092	.101	.1	.923	.002	1.09	.02	.009	.086	.223	.086	.223
MO			0	0	0	0	0	0	0	0	0	0	0	0
NA		>500	5.4	5.4	5.4	5.7	5.8	6	6	5.9	6.3	6.1	6.3	6.1
NI			0	0	0	0	0	0	0	0	0	0	0	0
P			0	0	0	.96	0	2.02	.46	0	0	0	0	0
PB	<.01		0	0	0	0	.003	0	0	.009	.002	0	.002	0
SB			0	0	0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60		.7	.7	.7	5.8	.7	8.6	.3	.3	.4	.9	.4	.9
SN			0	0	0	0	.01	0	0	.01	.02	.01	.02	.01
SR			.128	.135	.135	.157	.138	.171	.125	.128	.141	.14	.141	.14
TI			0	0	0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	.009	.003	.006	.005	.005	.011	.016	.021	.016	.021	.016

WATER QUALITY VALUES FOR DUTCH
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	FEB06/82 RESORT WELL	APR28/82 RESORT WELL	SEP01/82 RESORT WELL	OCT23/82 RESORT WELL	FEB10/83 RESORT WELL
ALK.TOT	20-300		93.5	92	96	100	108
AMMON.	<.002	>.08	.005	0	0	0	0
CO2	2-5	>20					
CHLOR.	<170	>600	1.6	2	1.4	1.7	2.7
COLOR	<15		0	0			
COND.FLD	150-2000						
COND.LAB	**		205	219.2	198	207	229
DO-PPM	>6-8	<4					
DO-%SAT	100%						
DGAS.TOT	<103%	>110%					
DGAS.NIT	100%						
HARDNESS	20-400		92.5	95.7	84.7	85.2	97.4
H2S	<.002	>.004					
NITRITE	<.012	.2	0	.005	0	0	0
NITRATE	<.12		1.19	1.31	.52	.01	.44
PH-FLD	6.8-8.5	<5,>9					
PH-LAB	**	**	7.9	7.7	7.6	7.5	7.5
PHOSPH.	<.05		.045	.043	.045	.029	.033
RESID.TOT	<2000						
RESID.FIL	70-400		134	140	128	143	145
RESID.N.F	<3		0	0	0	0	0
SALIN.							
SILICA	<10-60		9.1	9.3	9.8	5.5	9.6
SULFATE	<90		7.2	6.9	6.5	4.6	4.9
TASTE	OK						
T.D.SOL	500-1000	15000					
TEMP.	4-18C	<2,>25					
TURBID	1-60	>1000	0	.1	0	0	0
METALS--							
AL	<.1	>5	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0
BA	<1		.002	.002	.003	.003	.003
CA	4-150	>300	26.5	26.6	23.8	23.8	27.2
CD	<.0004		0	0	.0007	0	.0005
CO			0	0	0	0	0
CR	<.01		0	0	0	0	0
CU	<.006		0	0	0	0	.001
FE	<.3		.01	.01	.066	.017	.007
HG	<.00005	>.0002	0	0	0	0	0
K		>50	2.45	2.57	2.56	3.38	3.26
MG	<10	>100	6.3	7.1	6.1	6.2	7.1
MN	<.05	>15	0	0	.002	.003	0
MO			0	0	0	0	0
NA		>500	5.4	5.9	5.9	6.3	6.6
NI			0	0	0	0	0
P			.07	0	.05	.08	0
PB	<.01		0	0	0	0	0
SB			0	0	0	0	0
SE		>2.5	0	0	0	0	0
SI	<10-60		9	9.4	9.3	9.2	9.3
SN			0	0	0	0	0
SR			.14	.154	.142	.149	.165
TI			0	0	0	0	0
V			0	0	0	0	0
ZN	<.005		.009	.029	.028	.017	.105

WATER QUALITY VALUES FOR EAGLE
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	MAR18/80 EAGLE RIVER	APR21/81 EAGLE RIVER	MAY27/81 EAGLE RIVER	JUN30/81 EAGLE RIVER	JUL21/81 EAGLE RIVER	AUG25/81 EAGLE RIVER	SEP24/81 EAGLE RIVER	OCT20/81 EAGLE RIVER	MAY09/83 EAGLE RIVER
ALK.TOT	20-300		23.3	21.5	15.4	16.3	16	24.3	23.4	20.9	19.5
AMMON.	<.002	>.08	0	0	0	0	0	.0072	.021	.0056	.006
CO2	2-5	>20									
CHLOR.	<170	>400	1.68	.65	.81	.54	.827	.85	.53	.78	.6
COLOR	<15		5								
COND.FLD	150-2000										
COND.LAB	"		75.7	58	44.7	43.5	48	70	65	61	55.7
DO-PPM	>6-8	<4	13.2								
DO-%SAT	100%		97.1								
DGAS.TOT	<103%	>110%	102.2								
DGAS.NIT	100%		103.6								
HARDNESS	20-400		28	24.8	18.2	17.1	18.6	28.3	26.9	24.7	23.5
H2S	<.002	>.004									
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.309	.13	.12	.061	.0479	.169	.061	.073	.19
PH-FLD	6.8-8.5	<5,>9	6.9								
PH-LAB	"	"	7.2	7.4	7.1	7.3	7.5	7.6	7.6	7.9	7.3
PHOSPH.	<.05		.005	.009	.018	0	.0118	.0061	.01	0	.008
RESID.TOT	<2000										
RESID.FIL	70-400		55	49	40	43.5	48	49	51	47	40
RESID.N.F	<3		0	0	22	0	0	0	0	0	8
SALIN.			0								
SILICA	<10-60		5.58					3.27	3.2		2.6
SULFATE	<90		9.7	5.3	4.8	4.5	4.2	8.8	7.3	7.7	6.5
TASTE	OK										
T.D.SOL	500-1000	15000									
TEMP.	4-18C	<2,>25	2	7	8	9	12.5				8.2
TURBID	1-60	>1000	0	1.8	3.6	0	1.3	0	0	0	.5
METALS—											
AL	<.1	>5	0	.262	.463		.105	0	0	0	.07
AS	<.5	>1	0	0	0	0	0	0	0	0	0
BA	<1		.0096	.0119	.0106	.0065	.0083	.009	.0088	.0083	.008
CA	4-150	>300	9.6	7.85	5.74	5.49	5.93	9.23	8.78	7.93	7.5
CD	<.0004		0	0	0	0		0	0	0	0
CO			0	0	0	0	0	0	0	0	0
CR	<.01		.022	0	0	0	0	0	0	0	0
CU	<.006		0	0	.0017	0		0	0	0	0
FE	<.3		.092	.325	.479	.107	.129	.0946	.0796	.0735	.063
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0
K		>50	.935	.904	.752	.613	.63	.846	.848	.802	.8
MG	<10	>100	.98	1.27	.93	.82	.92	1.20	1.22	1.18	1
MN	<.05	>15	.0048	.0121	.0106	.0038	.0054	.003	.0028	0	0
MO			0	0	0	0	0	0	0	0	0
NA		>500	1.63	1.25	.86	.76	.75	1.26	1.27	1.11	1.1
NI			0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0		0	0	0	0
SB			0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0
SI	<10-60		3.79	4.13	2.83	2.58	2.51	3.34	2.97	3.24	3.2
SN			0	0	0	0	0	0	0	0	0
SR			.0561	.0518	.0329	.0295	.0316	.047	.047	.0434	.04
TI			0	.0179	.037	0	.0131	.009	.0095	0	0
V			0	0	0	0	0	0	0	0	0
ZN	<.005		0	.0011	.0021	0		.0013	.0013	0	0

WATER QUALITY VALUES FOR EAGLE
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	PUMP TEST MAR16/80 1.5 HRS WELL #1	MAR17/80 24 HRS WELL #1	MAR18/80 48 HRS WELL #1	MAR19/80 72.5 HRS WELL #1	AUG04/82 EAGLE WELL #1
ALK.TOT	20-300		28.2	29.7	30.7	31	34
AMMON.	<.002	>.08	0	0	0	0	.008
CO2	2-5	>20					
CHLOR.	<170	>400	1.6	2.12	1.75	1.79	7.5
COLOR	<15		0	0	0	0	
COND.FLD	150-2000		58	59	55	57	
COND.LAB	**		82.5	88	87.8	90.4	114
DO-PPM	>6-8	<4	4.3	4.1	4	4.2	
DO-%SAT	100%		36.9	35.8	33.7	35.5	
DGAS.TOT	<103%	>110%	92	93.7	94.3	94.2	
DGAS.NIT	100%		106.6	109.1	110.5	109.8	
HARDNESS	20-400		35.8	36.5	38	38.9	54.4
H2S	<.002	>.004					
NITRITE	<.012	.2	0	0	0	0	0
NITRATE	<.12		.324	.387	.155	.245	.12
PH-FLD	6.8-8.5	<5,>9	6.5	6.4	6.4	6.6	
PH-LAB	**	**	6.4	6.4	6.5	6.5	6.7
PHOSPH.	<.05		0	0	0	0	0
RESID.TOT	<2000						
RESID.FIL	70-400		58	63	64	64	76
RESID.N.F	<3		0	0	0	0	17
SALIN.							
SILICA	<10-60		5.59	5.57	5.48	5.65	5.4
SULFATE	<90		7.7	8.2	8.25	7.9	9.5
TASTE	OK						
T.D.SOL	500-1000	15000					
TEMP.	4-18C	<2,>25	7	7.1	7.3	7.4	
TURBID	1-60	>1000	1.9	0	0	0	2.7
METALS---							
AL	<.1	>5	.118	0	0	0	0
AS	<.5	>1	0	0	0	0	0
BA	<1		.0079	.0056	.0058	.006	.006
CA	4-150	>300	11.3	11.6	12.1	12.4	13.8
CD	<.0004		.0022	.0011	0	0	.0007
CO			0	0	0	0	.007
CR	<.01		0	0	0	0	0
CU	<.006		.0066	.0026	.0026	.0028	.006
FE	<.3		.128	.026	.038	.019	6.38
HG	<.00005	>.0002	0	0	0	0	0
K		>50	1.26	1.23	1.28	1.28	1.5
MG	<10	>100	1.83	1.84	1.89	1.92	2
MN	<.05	>15	.0093	0	.0032	0	.017
MO			0	0	0	0	0
NA		>500	1.86	1.9	2.12	2.22	2.7
NI			0	0	0	0	0
P			0	0	0	0	0
PB	<.01		0	0	0	0	0
SB			0	0	0	0	0
SE		>2.5	0	0	0	0	0
SI	<10-60		5.85	5.58	5.78	5.77	5.7
SN			0	0	0	0	0
SR			.0655	.0664	.0699	.0712	.079
TI			0	0	0	17	0
V			0	0	0	0	0
ZN	<.005		.0174	.0141	.0066	.008	.003

WATER QUALITY VALUES FOR EAGLE
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	APR05/83 EAGLE WELL #2	PUMP TEST MAY07/83 2 HRS WELL #2	MAY07/83 7 HRS WELL #2	MAY07/83 11 HRS WELL #2	MAY08/83 24 HRS WELL #2	MAY09/83 48 HRS WELL #2	MAY10/83 72 HRS WELL #2	MAY11/83 96 HRS WELL #2
ALK.TOT	20-300		63	58.5	57.5	58	57	55	56	55
AMMON.	<.002	>.08	.033	.02	.019	.018	.021	.022	.017	.014
CO2	2-5	>20								
CHLOR.	<170	>400	5.5	3.7	3.5	3.4	3.2	3.1	2.9	3
COLOR	<15									
COND.FLD	150-2000									
COND.LAB	**		239	208	202	198	191	183	179	177
DO-PPM	>6-8	<4			2.4		2.3	2.1	1.7	1.6
DO-%SAT	100%				22.27		21.08	19.18	14.76	14.26
DGAS.TOT	<103%	>110%			98.32		96.5	96.65	95.57	95.31
DGAS.NIT	100%				118.5		116.5	117.2	117	116.8
HARDNESS	20-400		92.9		72.5		68.6	67.7	66.5	65.1
H2S	<.002	>.004	PRESENT	PRESENT	PRESENT	PRESENT				
NITRITE	<.012	.2	0	0	0	0	0	0	0	0
NITRATE	<.12		0	.02	.06	.03	.09	.41	.06	.04
PH-FLD	6.8-8.5	<5,>9	8.3		8.75		7.75	7.7	7.45	7.25
PH-LAB	**	**	8.2	7.8	7.7	7.7	7.6	7.6	7.6	7.5
PHOSPH.	<.05		.229	.025	.007	.021	.079	.022	.019	.02
RESID.TOT	<2000									
RESID.FIL	70-400		148	120	124	127	123	115	111	119
RESID.N.F	<3		143	0	0	0	0	0	0	8
SALIN.										
SILICA	<10-60		5.9	6	5.9	5.9	5.9	5.4	5.2	5.1
SULFATE	<90		38.5	32.4	31.2	30.4	28.4	27.1	24.9	23.9
TASTE	OK		BAD							
T.D.SOL	500-1000	15000								
TEMP.	4-18C	<2,>25	9.5		9.7		9.2	9.2	8.7	8.6
TURBID	1-60	>1000	34	.1	.1	.1	.1	.1	.1	0
METALS--										
AL	<.1	>5	.95		0		0	.05	0	0
AS	<.5	>1	0		0		0	0	0	0
BA	<1		.042		.023		.022	.022	.021	.021
CA	4-150	>300	26.5		24.2		22.9	22.5	22.1	21.7
CD	<.0004		0		0		0	0	0	0
CO			0		0		0	0	0	0
CR	<.01		0		0		0	.024	.015	.022
CU	<.006		.061		.001		0	.006	0	0
FE	<.3		4.17		.095		.049	.079	.053	.039
HG	<.00005	>.0002	0		0		0	0	0	.0002
K		>50	3.42		1.81		1.72	2.19	2.22	1.99
MG	<10	>100	3.3		2.8		2.7	2.6	2.6	2.6
MN	<.05	>15	.118		.056		.052	.058	.104	.07
MO			0		0		0	0	0	0
NA		>500	15		11.8		10.8	10.1	10	9.1
NI			0		0		0	0	0	0
P			.1		0		0	0	0	0
PB	<.01		.003		0		0	0	0	0
SB			0		0		0	0	0	0
SE		>2.5	0		0		0	0	0	0
SI	<10-60		6.7		5.7		5.6	5.6	5.6	5.6
SN			0		0		0	0	0	0
SR			.193		.168		.16	.155	.152	.148
TI			.047		0		0	.002	0	0
V			0		0		0	0	0	0
ZN	<.005		.008		.03		0	.012	.01	.004

WATER QUALITY VALUES FOR FINN
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	AUG21/79 FINN CREEK	NOV29/79 FINN CREEK	APR17/80 FINN CREEK	JUN22/80 FINN CREEK	APR15/81 FINN CREEK	APR28/81 FINN CREEK	MAY26/81 FINN CREEK	JUN30/81 FINN CREEK	JUL28/81 FINN CREEK	AUG25/81 FINN CREEK
ALK.TOT	20-300		20	19.5	10.7	19.5	18	12.5	6.32	8.94	11.5	18.5
AMMON.	<.002	>.08	.0183	0	0	0	0	0	.005	0	0	.0057
CO2	2-5	>20										
CHLOR.	<170	>400	0	.5	.96	0	0	.96	.6	0	0	.61
COLOR	<15		0	5	16		0					
COND.FLD	150-2000						25					
COND.LAB	"		47.4	49.2	30.2	48.1	43.6	32.4	16.6	20.1	23.5	40
DO-PPM	>6-8	<4					12.4					
DO-%SAT	100%						99.1					
DGAS.TOT	<103%	>110%					101.5					
DGAS.NIT	100%						102.2					
HARDNESS	20-400		16.9	20.2	13.8	21.1	17.2	12.4	6.75	7.86	9.68	16.5
H2S	<.002	>.004										
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.0561	.151	.1	0	.075	.097	.068	.058	.096	.027
PH-FLD	6.8-8.5	<5,>9					7.4					
PH-LAB	"	"	7.3	7.2	6.9	7.3	7.3	7	6.9	7.1	7.4	7.6
PHOSPH.	<.05		.0065	0	.0096	0	.0058	0	.019	0	0	0
RESID.TOT	<2000											
RESID.FIL	70-400		40	42	33	45	36	34	21	20.5	25	31
RESID.N.F	<3		0	0	0	0	0	0	30	0	0	0
SALIN.												
SILICA	<10-60		2.66	3.66	3.33	3.69	3.9				1.85	2.65
SULFATE	<90		2.3	3.4	3.2	4.4	7.1	2.3	1.38	1.3	0	1.8
TASTE	OK						OK					
T.D.SOL	500-1000	15000										
TEMP.	4-18C	<2,>25				12.6	3.4	3	5	6	11.5	14
TURBID	1-60	>1000	0	0	3.2	1.7	0	1.3	6	0	1	0
METALS—												
AL	<.1	>5	0	0	.302	0	.055	.189	.437	.113	.108	.066
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0
BA	<1		.0037	.0033	.0065	.0126	.004	.004	.0048	.0026	.0028	.0035
CA	4-150	>300	5.94	7.03	4.73	6.73	5.9	4.24	2.29	2.8	3.43	5.85
CD	<.0004		0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	.0016	0	0	0
FE	<.3		.018	.014	.144	.131	.0516	.0911	.22	.0631	.0669	.0397
HG	<.00005	>.0002	0	0	0	0	.00022	0	0	0	0	0
K		>50	.474	.441	.502	.56	.16	.44	.336	.222	.256	.406
MG	<10	>100	.492	.648	.471	1.05	.59	.45	.25	.21	.27	.47
MN	<.05	>15	0	0	.0084	.0104	.0016	.0035	.0138	.0031	.0029	.0023
MO			0	0	0	0	0	0	0	0	0	0
NA		>500	1.1	1.84	1.13	1.33	1.64	1.5	0	.51	.58	1.11
NI			0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0
SI	<10-60		2.41	2.99	3.42	3.64	3.72	3.5	1.77	1.88	1.76	2.68
SN			0	0	0	0	0	0	0	0	0	0
SR			.0564	.0636	.0373	.0481	.0545	.0374	.0201	.0257	.0337	.0554
TI			0	0	.0092	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	.006	.0025	0	0	.001	.002	.0013	.0025	.0015

WATER QUALITY VALUES FOR FINN (Cont'd)
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	SEP30/81 FINN CREEK	OCT13/81 FINN CREEK	MAY04/82 FINN CREEK	JUN02/82 FINN CREEK	JUL06/82 FINN CREEK	JUL28/82 FINN CREEK
ALK.TOT	20-300		13.5	12.2	12.5	7	7.5	12
AMMON.	<.002	>.08	.0083	0	0	.007	0	0
CO2	2-5	>20						
CHLOR.	<170	>400	0	0	1.4	0	0	0
COLOR	<15				15			
COND.FLD	150-2000							
COND.LAB	**		31.4	29.9	34.7	18.4	17.5	30.1
DO-PPM	>6-8	<4						
DO-%SAT	100%							
DGAS.TOT	<103%	>110%						
DGAS.NIT	100%							
HARDNESS	20-400		12.7	12	14.2	8.85	8.77	13
H2S	<.002	>.004						
NITRITE	<.012	.2	0	0	.008	.007	0	.024
NITRATE	<.12		.04	.136	.1	.08	.03	.05
PH-FLD	6.8-8.5	<5,>9			6.5			
PH-LAB	**	**	7.3	7.2	7.4	7.1	7.6	7.3
PHOSPH.	<.05		.0055	0	.006	.006	.009	0
RESID.TOT	<2000							
RESID.FIL	70-400		35	34	34	23	24	29
RESID.N.F	<3		0	0	0	8	0	7
SALIN.								
SILICA	<10-60		2.66	2.76	3.5	2.1	1.9	2.4
SULFATE	<90		0	2.8	3	2.7	4.1	2.2
TASTE	OK							
T.D.SOL	500-1000	15000						
TEMP.	4-18C	<2,>25			2			
TURBID	1-60	>1000	1	0	1.2	2	2.5	.2
METALS--								
AL	<.1	>5	.12	.114	.16	.21	.24	.1
AS	<.5	>1	0	0	0	0	0	0
BA	<1		.0031	.0029	.005	.002	.004	.003
CA	4-150	>300	4.58	4.16	4.5	2.6	2.5	4.3
CD	<.0004		0	0	0	0	0	0
CO			0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0
CU	<.006		0	0	0	0	.002	.037
FE	<.3		.0873	.0472	.074	.083	.108	.124
HG	<.00005	>.0002	0	0	0	0	0	0
K		>50	.338	.322	.41	.32	.25	.3
MG	<10	>100	.31	.39	.5	.2	.2	.4
MN	<.05	>15	.0041	.0027	.003	.005	.004	.007
MO			0	0	0	0	0	0
NA		>500	.82	.83	1.4	.5	.4	.9
NI			0	0	0	0	0	0
P			0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0
SB			0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0
SI	<10-60		2.51	2.74	3.3	2.2	2	2.5
SN			0	0	0	0	0	0
SR			.0439	.039	.041	.022	.022	.039
TI			0	.0085	.003	.002	.005	0
V			0	0	0	0	0	0
ZN	<.005		0	.0015	0	0	0	.003

WATER QUALITY VALUES FOR FINN
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	APR13/81 1850 HR WELL F1	APR14/81 1100 HR WELL F1	PUMP TEST APR15/81 0500 HR WELL F1	APR15/81 1400 HR WELL F1	APR15/81 1700 HR WELL F1	APR27/82 FINN CR WELL F3	MAY04/82 FINN CR WELL F3	MAY13/82 FINN CR WELL F3	MAY20/82 FINN CR WELL F3	SEP01/82 FINN CR WELL F3	OCT23/82 FINN CR WELL F3
ALK.TOT	20-300		44.8	46	47.2	18	47.2	24	23	24	23	26	24.5
AMMON.	<.002	>.08	.0062	0	0	0	0	.005	0	0	0	0	.006
CO2	2-5	>20											
CHLOR.	<170	>400	.57	0	0	.61	.26	0	.4	0	0	0	0
COLOR	<15							0					
COND.FLD	150-2000												
COND.LAB	**		99	100	104	43.6	102	51.8	50.9	50.7	50.8	49.7	49.3
DO-FLD	>6-8	<4											
DO-%SAT	100%												
DGAS.TOT	<103%	>110%											
DGAS.%IT	100%												
HARDNESS	20-400		40	41.1	40.5	17.2	36.2	14.6	14.9	14.9	15.3	13.7	14
H2S	<.002	>.004											
NITRITE	<.012	.2	0	0	0	0	0	.007	.009	.007	.005	0	.005
NITRATE	<.12		.0525	.051	.049	.075	.05	.06	.06	.058	.06	.09	.39
PH-FLD	6.8-8.5	<5,>9											
PH-LAB	**	**	7.7	7.8	7.8	7.3	7.8	6.8	6.9	6.6	6.9	7.6	6.8
PHOSPH.	<.05		.01	.0087	.0087	.0058	.0081	.007	.007	.007	.006	.007	.006
RESID.TOT	<2000												
RESID.FIL	70-400		75	73	78	42	76	55	58	49	61	52	61
RESID.N.F	<3		0	0	0	0	0	0	0	5	0	0	0
SALIN.													
SILICA	<10-60		8.41	8.74	8.77	3.9	8.78	11.7	11.5	11.7	11.7	10.2	8.7
SULFATE	<90		2.4	6	6.4	7.1	6.3	2.1	6.5	4.1	2.5	2.4	1.1
TASTE	OK												
T.D.SOL	500-1000	15000											
TEMP.	4-18C	<2,>25											
TURBID	1-40	>1000	1.5	0	0	0	0	.1	.2	0	0	0	.1
METALS--													
AL	<.1	>5	0	0	0	.055	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0
BA	<1		.0028	.0018	.0028	.004	.0021	.146	.12	.106	.1	0	.065
CA	4-150	>300	12.5	13.8	13.2	5.9	11.6	3.7	3.7	3.8	3.8	3.5	3.5
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	0	0	0	0
FE	<.3		.0775	.0196	.0206	.0516	.0256	.067	.064	.068	.059	.013	.01
HG	<.00005	>.0002	0	0	0	.00022	0	0	0	0	0	0	0
K		>50	1.33	1.29	1.33	.16	1.35	.8	.75	.81	.89	.7	.81
MG	<10	>100	2.14	1.61	1.83	.59	1.76	1.1	1.2	1.1	1.2	1	1.1
MN	<.05	>15	.0063	.0016	.0017	.0016	.0015	.347	.338	.341	.345	.304	.298
MO			0	0	0	0	0	0	0	0	0	0	0
NA		>500	3.65	3.66	3.75	1.64	3.72	4.6	4.7	4.4	4.8	4.4	4.4
NI			0	0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60		7.83	7.93	8.16	3.72	8.01	11.9	11.2	12	12.1	11.1	11.3
SN			0	0	0	0	.0098	0	0	0	0	0	0
SR			.0851	.0872	.0888	.0545	0	.045	.044	.044	.044	.041	.041
TI			0	0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	0	0	0		0	.004	0	0	0	0

WATER QUALITY VALUES FOR HIRSCH
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUN06/80 CR BELL BRIDGE	JUN09/80 CR BELL BRIDGE	JUN24/80 CR BELL BRIDGE	JUL05/80 CR BELL BRIDGE	JUL20/80 CR BELL BRIDGE	AUG13/80 CR BELL BRIDGE	AUG17/80 CR BELL BRIDGE	AUG19/80 CR BELL BRIDGE
ALK.TOT	20-300		10.1	9.6	13.5	10.1	12.6	14.4	11.4	14.9
AMMON.	<.002	>.08	.0065	0	0	0	0	0	.0054	0
CO2	3-5	>20								
CHLOR.	<170	>600	0	0	0	0	0	0	0	0
COLOR	<15									
COND.FLD	150-2000									
COND.LAB	**		24	22.5	29.7	24	29.8	26.6	32.9	35.6
DO-PPM	>6-8	<4			11		11			10
DO-%SAT	100%				95		100			94.5
DGAS.TOT	<103%	>110%								
DGAS.NIT	100%									
HARDNESS	20-400		10.5	10.2	12.5	10.9	13.7	14.6	12.4	16.5
H2S	<.002	>.004								
NITRITE	<.012	.2	0	0	0	0	0	0	0	0
NITRATE	<.12		0	0	.0238	0	0	.0112	.0301	.0281
PH-FLD	6.8-8.5	<5,>9			7.5		7.5			7.5
PH-LAB	**	**	7.1	7.1	7.2	7.6	7.1	7.3	7.1	7.2
PHOSPH.	<.05		.0129	.0239	0	.0106	0	0	.047	0
RESID.TOT	<2000									
RESID.FIL	70-400		16	17	22	18	21	20	21	23
RESID.N.F	<3		12	22	0	13	0	0	42	0
SALIN.										
SILICA	<10-60		.77	.78	0	.84	1.11	1.15	1.09	1.39
SULFATE	<90		1.6	1.8	2.1	1.6	1.6	2.1	2	2.3
TASTE	OK									
T.D.SOL	500-1000	15000								
TEMP.	4-18C	<2,>25	7.5	6	9.25	8.75	11.5	9	13	13
TURBID	1-60	>1000	2.3	4.8	0	2.1	1.7	1.15	8.9	1.4
METALS--										
AL	<.1	>5	.188	.281	0	.138	0	0	.1	.205
AS	<.5	>1	0	0	0	0	0	0	0	0
BA	<1		? .0145	? .0158	.0084	? .0124	.0078	.008	.0084	.0106
CA	4-150	>300	3.4	3.23	4.14	3.52	4.63	4.88	4.15	5.46
CD	<.0004		0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	.0024
FE	<.3		.211	.302	.032	.164	.051	0	.089	.106
HG	<.00005	>.0002	0	0	0	0	0	0	0	0
K		>50	.317	.302	.359	.314	.392	.231	.231	.406
MG	<10	>100	.5	.52	.523	.508	.526	.592	.502	.699
MN	<.05	>15	.008	.0104	0	.0053	0	0	.0033	.0148
MO			0	0	0	0	0	0	0	0
NA		>500	.464	.454	.56	.45	.742	.618	.481	.71
NI			0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0
SI	<10-60		.97	1.15	1.2	.96	1.21	1.11	.97	1.51
SN			0	0	0	0	0	0	0	0
SR			.0151	.0155	.0208	.0165	.0215	.0227	.0185	.0252
TI			.0092	.0137	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0
ZN	<.005		0	0	0	0	0	0	0	.0135

WATER QUALITY VALUES FOR HIRSCH (CONT)
(BELOW DETECTION LIMITS=0)

*-INSUFFICIENT SAMPLE

PARAM.	RECOMM.	TOXIC	APR08/80 LOGGING BRIDGE	APR13/80 LOGGING BRIDGE	APR19/80 LOGGING BRIDGE	APR28/80 LOGGING BRIDGE	MAY06/80 CR ZELL BRIDGE	MAY12/80 LOG BRDG #1	MAY12/80 LOG BRDG #2	MAY26/80 CR ZELL BRIDGE	MAY29/80 CR ZELL BRIDGE	MAY31/80 CR ZELL BRIDGE
ALK.TOT	30-300		15.9	13.3	13.5	14.9	13.9	10.3	12.4	14	11.6	11.1
AMMON.	<.002	>.08	0	.0061	.0099	.005	.0702	.0064	.0076	0	0	0
CO2	2-5	>20										
CHLOR.	<170	>400	.96	.53	0	.53	0	*	0	0	0	0
COLOR	<15											
COND.FLD	150-2000											
COND.LAB	**		40.3	31.4	30.3	34.4	33	23.6	28	33.5	27.5	29.5
DO-PPM	>6-8	<4	12			11				12		
DO-%SAT	100%		98			88.5				103		
DGAS.TOT	<103%	>110%										
DGAS.BIT	100%											
HARDNESS	20-400		18.6	15.5	15.2	16.7	14.8	10.9	12.8	15.4	12.8	10.7
H2S	<.002	>.004										
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.0773	.0905	.0949	.0867	.103	.0745	.0886	.0436	.024	0
PH-FLD	6.8-8.5	<5,>9	7.5			7.5				7.0-7.5		
PH-LAB	**	**	7.1	7.2	7.2	7.4	7.2	7.1	7.2	7.2	7.2	7.7
PHOSPH.	<.05		.0074	.0277	.0482	.014	.0287	*	.0213	.0065	0	.0097
RBBID.TOT	<2000											
RBBID.PIL	70-400		42	30	30	32	25	30	23	33	19	18
RBBID.H.F	<3		0	33	67	8	20	15	15	0	0	8
SALIN.												
SILICA	<10-60		2.14	.96	1.12	1.73	1.4	*	1.2	1.23	1.03	.87
SULFATE	<90		4.25	3.3	3.15	5.45	2.8	1.8	3.2	2.25	1.7	1.6
TASTE	OK											
T.D.SOL	500-1000	15000										
TEMP.	4-18C	<2,>25	1.5	5	2.5	6.5	2	8	8	9	6.5	7
TURBID	1-60	>1000	1.8	8.8	18	6.6	4.2	3.6	4	1.4	1.7	2.7
METALS--												
AL	<.1	>5	.159	.171	.271	.296	.108	.1	.108	0	0	.104
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0
BA	<1		.0117	.0112	.0132	.0119	.01	.0074	.0087	.0083	.0069	.0110
CA	4-150	>300	5.92	5.1	4.96	5.3	4.87	3.67	4.29	5.16	4.32	3.5
CD	<.0004		0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	0	0	0
FE	<.3		.141	.148	.209	.29	.121	.077	.088	.042	.026	.11
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0
K		>50	.573	.482	.52	.514	.448	.275	.354	.408	.334	.296
MG	<10	>100	.684	.68	.681	.852	.65	.433	.517	.616	.351	.483
MN	<.05	>15	.0207	.0067	.0097	.0087	.0088	.0039	.0046	0	.007	.0037
MO			0	0	0	0	0	0	0	0	0	0
NA		>500	1.54	.785	.763	.741	.774	.459	.785	.65	.851	.475
NI			0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0
SI	<10-60		2.53	.62	.97	2.06	.91	.81	.62	1.45	.91	.89
SN			0	0	0	0	0	0	0	0	0	0
SR			.0289	.022	.0217	.0236	.0127	.0161	.0184	.0225	.0215	.0167
TI			.0096	0	.012	.0141	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0
ZN	<.005		.001	0	0	.0018	0	0	0	.0019	.0018	0

WATER QUALITY VALUES FOR HOLMES
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	MAY07/80 HOLMES RIVER	JUL24/80 HOLMES RIVER	APR13/81 HOLMES RIVER	R24/81 HOLMES RIVER	MAY11/81 HOLMES RIVER	MAY28/81 HOLMES RIVER	JUN22/81 HOLMES RIVER	SEP09/81 HOLMES RIVER	OCT12/81 HOLMES RIVER
ALK.TOT	20-300		36	42	70.8	48	48.5	32.6	38.9	48.6	60
AMMON.	<.002	>.08	0	0	.0061	.0052	.009	0	0	0	0
CO2	3-5	>20									
CHLOR.	<170	>400	0	0	.92	0	.5	.63	0	0	.54
COLOR	<15		10	5							
COND.FLD	150-2000										
COND.LAB	**		87	106	180	122	121	80.5	95	123	155
DO-PPM	>6-8	<4			11		11		10	10	14
DO-%SAT	100%										
DGAS.TOT	<103%	>110%									
DGAS.NIT	100%										
HARDNESS	20-400		45	53						57.3	72.8
H2S	<.002	>.004									
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.14	.03	.101	.245	.241	.11	.06	.032	.0602
PH-FLD	6.8-8.5	<5,>9	8	9	7.5		7.5		7.5	8	8
PH-LAB	**	**	7.7	7.8	8.2	8.1	8	8.1	8	8	8.1
PHOSPH.	<.05		.01	.02	.0055	.014	.0084	.0238	0	0	0
RESID.TOT	<2000										
RESID.FIL	70-400		52	61	107	70	76	56	59	70	100
RESID.N.F	<3		13	7	0	40	12	72	8	0	0
SALIN.											
SILICA	<10-60		1	1	1.81	2.35	1.76	1.36	1.28	1.28	2.2
SULFATE	<90		8	10	14.8	9.3	8.7	7.7	8.4	12.7	15.4
TASTE	OK		OK	OK							
T.D.SOL	500-1000	15000									
TEMP.	4-18C	<2,>25	7.5	12.1	2		4.5		8	9	3.5
TURBID	1-60	>1000	4	6	1.3	6	2.6	10	1.2	2	0
METALS—											
AL	<.1	>5	0	.32	0	.146	.068	.189	0	.115	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0
BA	<1		.005	.011	.0065	.0059	.005	.0064	.0042	.0075	.0066
CA	4-150	>300	13	16	25.36	18.3	16	11.6	12.6	16.4	20.6
CD	<.0004		0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	.0016	0	0	0	0	0
FE	<.3		.15	.18	.201	.348	.18	.127	.06	.0979	.0804
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0
K		>50	.2	.2	.23	.316	.243	.194	.132	.18	.181
MG	<10	>100	3	3	5.51	3.83	3.76	2.55	3.03	3.97	5.18
MN	<.05	>15	.013	.012	.0136	.0139	.0113	.0134	.0057	.0054	.0062
MO			0	0	0	0	0	0	0	0	0
NA		>500	.6	.7	1.72	1.03	.97	.59	.64	.88	1.3
NI			0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0
SI	<10-60		1.2	1.6	1.74	1.81	1.64	1.63	1.26	1.35	1.52
SN			0	0	0	0	0	0	0	0	0
SR			.082	.102	.17	.118	.113	.0843	.0968	.119	.155
TI			0	0	0	.0251	.008	.015	.0092	.0091	.0076
V			0	0	0	0	0	0	0	0	0
ZN	<.005		.0022	0	.0016	.0013	0	.0014	0	0	.0011

WATER QUALITY VALUES FOR HORSEFLY
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	AUG06/80 HORSEFLY BRIDGE	SEP18/80 HORSEFLY BRIDGE	OCT15/80 HORSEFLY BRIDGE
ALK.TOT	20-300		35	42.5	38
ARSEN.	<.002	>.08	0		
CO2	2-5	>20			
CHLOR.	<170	>400	0	0	1.42
COLOR	<15				
COND.FLD	150-2000				
COND,LAB	**		86	95.5	98
DO-PPM	>6-8	<4			
DO-%SAT	100%				
DGAS.TOT	<103%	>110%			
DGAS.NIT	100%				
HARDNESS	20-400		42.2	43.5	44
H2S	<.002	>.004			
NITRITE	<.012	.2	0	0	0
NITRATE	<.12		0	.0104	.236
PH-FLD	6.8-8.5	<5,>9			
PH-LAB	**	**	7.7	7.8	7.9
PHORPH.	<.05		.0115	.0055	.007
RESID,TOT	<2000				
RESID,FIL	70-400		66	76	66
RESID,N.F	<1		0	0	0
SALIN.					
SILICA	<10-60		2.53	3.23	2.44
SULFATE	<80		6.15	6.05	6.7
TASTE	OK				
T.D.SOL	500-1000	15000			
TEMP.	6-18C	<2,>25			
TURBID	1-60	>1000	1.9	1.3	0
METALS—					
AL	<.1	>5	0	0	0
AS	<.5	>1	0	0	0
BA	<1		.0181	.0106	.0056
CA	6-150	>300	13.6	13.2	13.6
CD	<.0004		0	0	0
CO			0	0	0
CR	<.01		0	0	0
CU	<.006		.0014	0	0
FE	<.3		.116	.083	.011
HG	<.00005	>.0002	0	0	0
K		>50	.58	.0642	.434
MG	<10	>100	2	2.56	2.44
MN	<.05	>15	.0085	.0135	0
MO			0	0	0
NA		>500	.98	1.48	.884
NI			0	0	0
P			0	0	0
PB	<.01		0	0	0
SB			0	0	0
SE		>2.5	0	0	0
SI	<10-60		2.55	3.28	1.61
SN			0	0	0
SR			.0659	.0752	.127
TI			0	0	0
V			0	0	0
ZN	<.005		0	0	0

WATER QUALITY VALUES FOR INDIAN
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUL12/79 INDIAN RIVER	AUG27/79 INDIAN R (INTAKE)	APR20/81 0730 HR INDIAN R	APR21/81 1200 HR INDIAN R	APR21/81 1630 HR INDIAN R	APR21/81 1700 HR INDIAN R	APR22/81 0800 HR INDIAN R	JUL31/81 INDIAN RIVER	SEP30/81 INDIAN RIVER	OCT23/81 INDIAN RIVER	NOV04/81 INDIAN RIVER
ALK.TOT	20-300		7.45	8.87	13.1	14.1	15.1	10.2	14.2	11.1	9.85	13.6	10.1
AMMON.	<.002	>.08	0	0	.0505	.0434	.0445	0	.0464	.098	.0075	0	0
CO2	2-5	>20											
CHLOR.	<170	>600	0	0	.84	.76	.77	.62	.64	0	.95	.67	.753
COLOR	<15		7						7		0	0	0
COND.FLD	150-2000				28	25					27	28	22
COND.LAB	**		24.2	32.6	35	35	32.8	32.5	32.4	36.8	33.8	44	33
DO-PPM	>6-8	<4			4.4	5					11	12.2	11.6
DO-%SAT	100%				35.4	40.1					93.72	98.05	93.83
DGAS.TOT	<103%	>110%									101.93	101.03	100.13
DGAS.NIT	100%										104.12	101.82	101.8
HARDNESS	20-400		9.36	12.5	10.6	10.4	9.54	10.9	9.16	13.5	12.6	16.4	12.3
H2S	<.002	>.004											
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.072	.126	.135	.167	.175	.113	.178	.0065	.273	.156	.141
PH-FLD	6.8-8.5	<5,>9			6.5	6.5	6.1	6.8	6.9	6.8		7.6	7
PH-LAB	**	**	6.9	6.8	6.4	6.4	6.6	6.8	6.5	7.4	7	7.4	7.1
PHOSPH.	<.05		0	0	.0111	.0108	.0109	0	.0115	0	0	0	0
RESID.TOT	<2000						15	46					
RESID.FIL	70-400		27	28	34	33	29	26	31	27	29	34	29
RESID.N.F	<3		0	0	0	0	0	0	0	0	0	0	0
SALIN.											0	0	0
SILICA	<10-60		1.36	1.55	5.75	5.46	5.28	2.14	5.08	1.93	1.75	2.37	2.02
SULFATE	<90		2.2	4.13	4	3.5	2	4.4	2.1	5	3.1	6.7	5.3
TASTE	OK								OK	OK			
T.D.SOL	500-1000	15000											
TEMP.	4-18C	<2,>25			7	6.9		8.5	10.5	15	9.35	7.1	7.1
TURBID	1-60	>1000	0	0	0	0	2.5	0	3.5	0	0	0	1
METALS--													
AL	<.1	>5	0	0	0	0	.071	.098	0	.051	.088	0	.054
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0
BA	<1		.0069	.0108	.0066	.0063	.006	.0109	.0061	.0112	.0107	.0129	.01
CA	4-150	>300	3.23	4.36	3.6	3.54	3.06	3.67	3.04	4.65	4.45	5.68	4.23
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	.0023	.001	0	0	0	0	0	0	0
FE	<.3		.033	0	.824	1.02	1.05	.0117	1.06	.0105	.071	.01	.06
HG	<.00005	>.0002	0	0	.00058	0	0	0	0	.00023	0	.00076	0
K		>50	.197	.317	.311	.316	.293	.279	.288	.308	.278	.332	.31
MG	<10	>100	.314	.397	.38	.38	.46	.42	.38	.46	.37	.53	.41
MN	<.05	>15	0	0	.0366	.0397	.039	0	.0381	0	.0026	0	.0017
MO			0	0	0	0	0	0	0	0	0	0	0
NA		>500	.57	.86	2.19	1.91	1.59	.98	1.67	.85	.81	.95	.71
NI			0	0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60		1.51	1.78	5.14	4.86	5.01	2.05	4.86	1.82	1.93	2.22	1.99
SN			0	0	0	0	0	0	0	0	0	0	0
SR			.0131	.0183	.0243	.0236	.0233	.0174	.023	.0195	.0189	.0232	.0174
TI			0	0	0	0	0	0	0	.0076	0	0	0
V			0	0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	0	.0032	.0044	.0023	.0011	.0018	0	.0024	0	0

WATER QUALITY VALUES FOR INDIAN (CON'T)
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	DEC04/81 INDIAN RIVER	DEC10/81 INDIAN RIVER	JAN25/82 INDIAN RIVER	DEC21/82 INDIAN RIVER	JUL31/81 FORESTRY CREEK
ALK.TOT	20-300		10.7	6.37	7.5	5	6.58
AMMON.	<.002	>.08	0	0	0	0	.092
CO2	2-5	>20					
CHLOR.	<170	>600	1.42	.86	.5	.7	0
COLOR	<15		0	10	0		
COND.FLD	150-2000		18	13	16	10	
COND.LAB	**		36.5	22.9	27.4	18.4	19
DO-PPM	>6-8	<4	11.5	12.5		12.8	
DO-%SAT	100%		90.27	97.56		96.82	
DGAS.TOT	<103%	>110%	101.71	100	102.78	103.55	
DGAS.HIT	100%		104.75	100.65		105.34	
HARDNESS	20-400		13.1	8.26	8.94	6.76	6
H2S	<.002	>.004					
NITRITE	<.012	.2	0	0	0	0	0
NITRATE	<.12		.165	.118	.45	.11	.0055
PH-FLD	6.8-8.5	<5,>9	7.3	7.1		6.6	
PH-LAB	**	**	6.9	6.7	6	6.5	7
PHOSPH.	<.05		.0079	.0126	0	.076	0
RESID.TOT	<2000						
RESID.FIL	70-400		26	23	26	18	28
RESID.N.F	<3		0	0	0	0	0
SALIN.			0	0	0		
SILICA	<10-60		1.83	1.21	2.3	1.5	1.68
SULFATE	<90		6.35	4.65	4.05	2.8	2.9
TASTE	OK						
T.D.SOL	500-1000	15000					
TEMP.	4-18C	<2,>25	5.2	4.9	3.8	3.7	
TURBID	1-60	>1000	0	6	1.2	0	0
METALS—							
AL	<.1	>5	.055	.534	.051	.08	.069
AS	<.5	>1	0	0	0	0	0
BA	<1		.0111	.0122	.0163	.006	.0045
CA	4-150	>300	4.49	2.6	3.02	2.2	2.09
CD	<.0004		0	0	0	0	0
CO			0	0	0	0	0
CR	<.01		0	0	0	0	0
CU	<.006		0	.0089	0	0	0
FE	<.3		0	.405	.02	.015	.0123
HG	<.00005	>.0002	0	.00031	0	0	.00023
K		>50	.296	.23		.18	.142
MG	<10	>100	.45	.43	.34	.2	.19
MN	<.05	>15	0	.0139	.0014	0	0
NO			0	0	0	0	0
NA		>500	.91	.55	.95	.6	.86
NI			0	0	0	0	0
P			0	0	0	0	0
PB	<.01		0	0	0	0	0
SB			0	0	0	0	0
SE		>2.5	0	0	0	0	0
SI	<10-60		2.11	2.15	2.47	1.3	1.59
SN			0	0	0	0	0
SR			.0185	.0109	.0162	.01	.009
TI			0	.0135	0	0	.0077
V			0	0	0	0	0
ZN	<.005		0	.002	.001	0	0

WATER QUALITY VALUES FOR INDIAN (CON'T)
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	1972 WELL 72-1	1978 45 HR WEL 78-1	AUG25/79 69 HR WEL 79-1	AUG26/79 91HR WEL 79-1	AUG27/79 93 HR WEL 79-1	JUL12/79 INDIAN WEL 79-1	JUL13/79 45 HR WEL 79-1	JUL14/79 72 HR WEL 79-1	JUL15/79 99 HR WEL 79-1	AUG27/79 45 HR WEL 79-1	APR21/81 30.5 HR WEL 81-1	APR22/81 45.5 HR WEL 81-1
ALK.TOT	20-300		7	4	4	4	4	4.66	4.66	4.67	4.36	3.67	13.1	14.2
AMMON.	<.002	>.08		0	0	0	0	.0065	.0075	.0139	.0153	0	0	0
CO2	2-5	>20												
CHLOR.	<170	>400	.5	0	0	0	0	0	0	0	0	0	.77	.64
COLOR	<15		0											
COND.FLD	150-2000												25	25
COND.LAB	**			15	15	16	16	17.7	18.2	17.4	17.5	15.5	32.8	32.4
DO-PPM	>6-8	<4		6	6	6	6						5.1	5.2
DO-%SAT	100%			50	50	50							41.1	42.2
DGAS.TOT	<103%	>110%		85	86	86	86						104.1	103.6
DGAS.NIT	100%			96	97	96	96						120.9	120
HARDNESS	20-400		2	5	5	5	5	5.09	5.27	5.18	5.18	4.55	9.54	9.16
H2S	<.002	>.004												
NITRITE	<.012	.2		0	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.14	.14	.14	.13	.13	.15	.18	.15	.18	.138	.175	.178
PH-FLD	6.8-8.5	<5,>9	6	6	6	6	6						6.7	6.5
PH-LAB	**	**		5.9	5.9	5.7	5.8	6.1	6	6	6	5.9	6.6	6.5
PHOSPH.	<.05		0	0	0	0	0	0	0	0	0	0	.0109	.0115
RESID.TOT	<2000													
RESID.FIL	70-400			18	18	18	18	22	22	16	17	18	29	31
RESID.N.F	<3		.1	0	0	0	0	0	0	0	0	0	0	0
SALIN.														
SILICA	<10-60		3	2	2	2	2	2.22	2.27	2.12	2.12	1.54	5.28	5.08
SULFATE	<90		0	2	2	2	2	2.1	2.1	2.3	1.8	1.8	2	2.1
TASTE	OK			OF	OK	OK	OK							
T.D.SOL	500-1000	15000	13											
TEMP.	4-18C	<2,>25		5.5	5.5	5.5	5.5						6.9	7
TURBID	1-60	>1000	.02	0	0	0	0	0	0	0	0	0	2.5	3.5
METALS--														
AL	<.1	>5	0	0	0	0	0	0	0	0	0	0	.071	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0	0
BA	<1		0	.005	.005	.005	.005	.0037	.0043	.0033	.004	.0049	.006	.0061
CA	4-150	>300	.5	2	2	2	2	1.73	1.78	1.75	1.75	1.53	3.06	3.04
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	.001	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0	0	0
CU	<.006		.015	0	0	0	0	0	0	0	0	0	0	0
FE	<.3		.07	0	0	0	0	.032	.037	.019	.019	0	1.05	1.06
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0	0	0
K		>50	0	.2	.2	.2	.2	.231	.229	.232	.228	.204	.293	.288
MG	<10	>100	.3	.2	.2	.2	.2	.187	.201	.197	.196	.176	.46	.38
MN	<.05	>15	0	0	0	0	0	0	.003	0	.0037	0	.039	.0381
MO			0	0	0	0	0	0	0	0	0	0	0	0
NA		>500	.9	.6	.6	.6	.6	.68	.7	.8	.71	.58	1.59	1.67
NI			0	0	0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60		3	12	12	12	12	1.73	2.37	2.3	2.28	1.57	5.01	4.86
SN			0	0	0	0	0	0	0	0	0	0	0	0
SR			0	.007	.007	.007	.008	.0089	.009	.0093	.0089	.0069	.0233	.023
TI			0	0	0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	6.01	6.01	0	0	0
ZN	<.005		0	0	0	0	0	0	0	0	0	.0015	.0023	.0018

WATER QUALITY VALUES FOR INDIAN (CON'T)
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	1972 WELL 72-2	1978 24 HR WEL 78-2	JUL12/79 48 HR WEL 79-2	JUL14/79 72 HR WEL 79-2	JUL15/79 99 HR WEL 79-2	APR23/81 2 HR WEL 81-2	APR24/81 23.5 HR WEL 81-2	APR24/81 29 HR WEL 81-2
ALK.TOT	20-300		8	5	5	5	4	9.85	10.3	10.8
AMMON.	<.002	>.08		.0065	.0075	.0139	.0153	0	0	0
CO2	2-5	>20								
CHLOR.	<170	>400	0	0	0	0	0	.61	.56	.59
COLOR	<15		0	0				0		
COND.FLD	150-2000							18	20	22
COND.LAB	**			18	18	17	18	29.2	30	35.5
DO-PPM	>6-8	<4		8	7	7	7	6.5	5.4	6
DO-%SAT	100%			70	60	60	60	55.2	45.2	50.3
DGAS.TOT	<103%	>110%		99	98	98	98	105.6	103.6	104.3
DGAS.HIT	100%			108	110	109	109	119	119.1	118.6
HARDNESS	20-400		4	5	5	5	5	9.76	9.18	9.3
H2S	<.002	>.004								
NITRITE	<.012	.2		0	0	0	0	0	0	0
NITRATE	<.12		0	.15	.18	.15	.18	.28	.23	.226
PH-FLD	6.8-8.5	<5,>9		6	6	6.25	6.25	5.7	5.5	5.7
PH-LAB	**	**	5.3	6.1	6	6	6	7.1	6.8	6.2
PHOSPH.	<.05		0	0	0	0	0	0	0	0
RESID.TOT	<2000									
RESID.FIL	70-400			22	22	16	17	32	32	34
RESID.N.F	<3		.1	0	0	0	0	0	0	0
SALIN.								0		
SILICA	<10-40		5	2	2	2	2	6.44	7.45	6.67
SULFATE	<90		0	2	2	2	2	2.7	2.7	2.7
TASTE	OK			OK	OK	OK	OK			
T.D.SOL	500-1000	15000	19							
TEMP.	4-18C	<2,>25	8.5	7.5	7	7	7	8.7	8.5	8.6
TURBID	1-40	>1000	.1	0	0	0	0		0	0
METALS—										
AL	<.1	>5	0	0	0	0	0	0	0	0
AS	<.5	>1		0	0	0	0	0	0	0
BA	<1			.004	.004	.003	.004	.0035	.0024	.0023
CA	4-150	>300	0	2	2	2	2	3.3	3.1	3.13
CD	<.0004			0	0	0	0	0	0	0
CO				0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	.0323	0	0
CU	<.006		0	0	0	0	0	.006	.0029	.0035
PB	<.3		.05	.03	.04	.02	.02	.0469	.0389	.0399
HG	<.00005	>.0002		0	0	0	0	0	0	0
K		>50	0	.2	.2	.2	.2	.291	.227	.238
MG	<10	>100	1	.2	.2	.2	.2	.37	.35	.36
MN	<.05	>15	0	0	0	0	.004	.0335	.0089	.0103
MO				0	0	0	0	0	0	0
NA		>500	2.5	.7	.7	.8	.7	2.64	1.66	1.9
NI				0	0	0	0	0	0	0
P				0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	.0064	0	0
SB				0	0	0	0	0	0	0
SE		>2.5		0	0	0	0	0	0	0
SI	<10-40			2	2	2	22	5.66	5.59	5.6
SN				0	0	0	0	0	0	0
SR				.009	.009	.009	.009	.0272	.0255	.0257
TI				0	0	0	0	0	.0096	.009
V				0	0	6.01	6.01	0	0	0
ZN	<.005		0	0	0	0	0	.0079	.0013	.0018

WATER QUALITY VALUES FOR INDIAN (CON'T)
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	AUG25/79 45 HR WELL B	AUG26/79 69 HR WELL B	AUG27/79 91 HR WELL B	AUG27/79 93 HR WELL B	1977 MIN(L.B) SITE#3	1977 MAX(L.B) SITE#3	JUL12/78 (R.B) SITE#3	AUG27/78 (L.B) SITE#3
ALK.TOT	20-300		3.67	3.57	3.55	3.55	2	4	8	9
AMMON.	<.002	>.08	0	0	0	0	0	0	0	0
CO2	2-5	>20								
CHLOR.	<170	>400	0	0	0	0	0	0	0	0
COLOR	<15								7	
COND.FLD	150-2000									
COND.LAB	**		15.5	15.4	16.3	15.6	15	35	24	33
DO-PPM	>6-8	<4								
DO-%SAT	100%									
DGAS.TOT	<103%	>110%								
DGAS.NIT	100%									
HARDNESS	20-400		4.55	4.65	4.64	4.6			9	13
H2S	<.002	>.004								
NITRITE	<.012	.2	0	0	0	0	0	0	0	0
NITRATE	<.12		.138	.138	.131	.134	.06	.23	.07	.13
PH-FLD	6.8-8.5	<5,>9					6.1	6.8	6.9	6.8
PH-LAB	**	**	5.9	5.9	5.7	5.8				
PHOSPH.	<.05		0	0	0	0	0	0	0	0
RESID.TOT	<2000						15	46		
RESID.FIL	70-400		18	18	18	18	10	30	27	28
RESID.N.F	<3		0	0	0	0	0	0	0	0
SALIN.										
SILICA	<10-60		1.54	1.6	1.52	1.48	1	3	1	2
SULFATE	<90		1.8	1.9	1.9	1.7	2	4	2	4
TASTE	OK								OK	OK
T.D.SOL	500-1000	15000								
TEMP.	4-18C	<2,>25							10.5	15
TURBID	1-60	>1000	0	0	0	0	0	0	0	0
METALS--										
AL	<.1	>5	0	0	0	0			0	0
AS	<.5	>1	0	0	0	0			0	0
BA	<1		.0049	.0047	.0054	.053			.007	.011
CA	4-150	>300	1.53	1.55	1.56	1.55	1	4	3	4
CD	<.0004		0	0	0	0			0	0
CO			0	0	0	0			0	0
CR	<.01		0	0	0	0			0	0
CU	<.006		0	0	0	0	0	0	0	0
FE	<.3		0	0	0	0	0	0	0	0
HG	<.00005	>.0002	0	0	0	0			0	0
K		>50	.204	.21	.208	.208	.1	.3	.2	.3
MG	<10	>100	1.76	.189	.182	.177	.15	.4	.3	.4
MN	<.05	>15	0	0	0	0			0	0
MO			0	0	0	0			0	0
NA		>500	.58	.59	.58	.57	.5	1.2	.6	.9
NI			0	0	0	0			0	0
P			0	0	0	0			0	0
PB	<.01		0	0	0	0	0	0	0	0
SB			0	0	0	0			0	0
SE		>2.5	0	0	0	0			0	0
SI	<10-60		1.57	1.59	1.6	1.59			2	2
SN			0	0	0	0			0	0
SR			.0069	.0069	.0073	.0076			.0131	.0183
TI			0	0	0	0			0	0
V			0	0	0	0			0	0
ZN	<.005		0	0	.0012	.001	0	.04	0	0

WATER QUALITY VALUES FOR INDIAN
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	DEC20/82 1330 HR TD-82-1	DEC21/82 1000 HR TD-82-1	DEC21/82 1230 HR TD-82-1	DEC22/82 1000 HR TD-82-1	OCT23/81 INDIAN WEL E1-1	NOV04/81 INDIAN WEL E1-2	SEP30/81 INDIAN WELL E2	DEC04/8 INDIAN WEL E3-1	DEC10/81 INDIAN WEL E3-2	JAN25/82 INDIAN WELL E4
ALK.TOT	20-300		6	6	6	6	14.5	12.8	13	11.7	8.82	13
ANION.	<.002	>.08	0	0	0	0	0	0	.0426	0	0	0
CO2	2-5	>20										
CHLOR.	<170	>600	.5	.5	.7	.7	3.86	2.41	.59	1.33	.75	0
COLOR	<15						0	0	0	0	5	0
COND.FLD	150-2000		12	11	11	11	4	32	27	16	12	21
COND.LAB	""		19.1	19.1	19.2	18.9	50.5	46.6	36.6	33.5	23.6	33.1
DO-PPM	>6-8	<4	7.1	7.5	6.6	6.5	2.5	5.6	3.4	3.2	7.8	3.8
DO-%SAT	100%		57.77	61.1	53.77	52.81	20.45	47.04	28.09	25.72	62.78	31.12
DGAS.TOT	<103%	>110%	102.1	103.55	101.18	103.41	100.26	100.52	100.26	104.74	102.77	102.12
DGAS.NIT	100%		113.89	114.84	113.79	116.86	121.47	114.73	119.44	125.74	113.4	120.99
HARDNESS	20-400		5.95	6.17	6.16	10.9	14.8	14	12	10	6.85	11.1
H2S	<.002	>.004										
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.13	.13	.13	.14	.115	.131	.283	.096	.176	.2
PH-FLD	6.8-8.5	<5,>9	6.7	6.1	6.5	6	6.3	6.3	6.3	7.1	7.2	6.2
PH-LAB	""	""	6.3	6.1	6.1	6	6.6	6.4	6.3	6.9	6.5	6.3
PHOSPH.	<.05		0	0	0	0	0	0	.0604	.024	.0085	0
RESID.TOT	<2000											
RESID.FIL	70-400		18	16	17	23	44	38	29	27	26	32
RESID.N.F	<3		5	0	0	0	0	0	0	0	0	0
SALIN.							0	0	0	0	0	0
SILICA	<10-60		2.1	2.1	2.1	2.2	6.74	4.02	4.06	5.77	3.04	5.1
SULFATE	<90		3.3	2.9	3.7	4.7	3.7	5.9	0	3.7	2.4	3.75
TASTE	OK											
T.D.SOL	500-1000	15000										
TEMP.	4-18C	<2,>25	6.75	6.75	6.75	6.75	7.8	8.6	8.15	6.2	6.2	6.4
TURBID	1-60	>1000	0	0	0	0	0	0	0	0	0	0
METALS—												
AL	<.1	>5	0	0	0	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0
BA	<1		.006	.006	.007	.006	.0045	.0079	.0132	.0028	.0079	.0071
CA	4-150	>300	2	2.2	2.2	4.2	5.01	4.81	4.18	3.48	2.43	3.82
CD	<.0004		0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	.018	0	0	0	0	.0054	0
FE	<.3		0	0	0	.007	.02	.01	.016	.51	.007	.02
HG	<.00005	>.0002	0	0	0	0	.00049	.00035	.00032	0	.00044	0
K		>50	.15	.14	.14	.15	.375	.384	.318	.244	.07	
MG	<10	>100	.2	.2	.2	0	.55	.48	.37	.33	.19	.39
MN	<.05	>15	0	0	0	0	.0019	.0037	.0112	.0105	.0017	.0018
MO			0	0	0	0	0	0	0	0	0	0
NA		>500	.7	.8	.7	1.6	2.79	2.48	1.52	1.73	.97	1.65
NI			0	0	0	0	0	0	0	0	0	0
P			0	0	0	.05	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0
SI	<10-60		1.8	1.8	1.8	2.2	6.4	4	4.34	5.98	3.12	5.27
SN			0	0	0	0	0	0	0	0	0	0
SR			.01	.011	.012	.016	.0368	.0296	.0253	.0229	.0134	.0251
TI			0	0	0	0	0	0	.0092	0	0	0
V			0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	0	0	0	.0176	.0317	.0166	.0093	.0089	.0163

WATER QUALITY VALUES FOR JOSEPH
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	MAY04/82 JOSEPH CREEK	JUN02/82 JOSEPH CREEK	JUL06/82 JOSEPH CREEK	JUL28/82 JOSEPH CREEK
ALK.TOT	20-300		82	26	15	89.5
AMMON.	<.002	>.08	0	.006	0	0
CO2	2-5	>20				
CHLOR.	<170	>400	.9	0	0	.5
COLOR	<15		0			
COND.FLD	150-2000					
COND.LAB	**		181	62.2	36.5	195
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.NIT	100%					
HARDNESS	20-400		89.7	29.1	16.4	95.1
H2S	<.002	>.004				
NITRITE	<.012	.2	.007	.006	0	.007
NITRATE	<.12		0	.01	.02	.05
PH-FLD	6.8-8.5	<5,>9				
PH-LAB	**	**	8.1	7.7	7.9	8
PHOSPH.	<.05		.006	.006	.007	.007
RESID.TOT	<2000					
RESID.FIL	70-400		122	48	33	130
RESID.N.F	<3		0	6	0	8
SALIN.						
SILIC	<10-60		4.6	3	2.5	4.1
SULFATE	<90		7.8	3.6	5.7	8.5
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25				
TURBID	1-60	>1000	.2	1.1	1.9	.8
METALS--						
AL	<.1	>5	.01	.06	.08	0
AS	<.5	>1	0	0	0	0
BA	<1		.047	.017	.016	.02
CA	4-150	>300	28	9	5.2	31.4
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	0	0
CU	<.006		0	0	0	.001
FE	<.3		.19	.045	.048	.077
HG	<.00005	>.0002	0	0	0	0
K		>50	.49	.34	.19	.85
MG	<10	>100	4.8	1.5	.7	3.9
MN	<.05	>15	.001	.003	.003	.006
MO			0	0	0	0
NA		>500	1.8	1	.6	2
NI			0	0	0	0
P			0	0	0	0
PB	<.01		0	0	0	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		4.3	3	2.4	4.4
SN			.01	0	0	0
SR			.082	.031	.023	.151
TI			0	0	.003	.002
V			0	0	0	0
ZN	<.005		0	0	0	.003

WATER QUALITY VALUES FOR KAKWEIKEN
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	AUG10/81 KAKWEIKEN RIVER	SEP02/81 KAKWEIK. RIVER	SEP08/81 KAKWEIK. RIVER	OCT20/81 KAKWEIK. RIVER
ALK.TOT	20-300		.6	5.15	7.72	9.37
AMMON.	<.002	>.08	.0287	.042	.167	.128
CO2	2-5	>20				
CHLOR.	<170	>400	.517	.53	.85	.92
COLOR	<15					
COND.FLD	150-2000					
COND.LAB	**		13.9	16.5	21.4	26.4
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.NIT	100%					
HARDNESS	20-400		4.35		6.8	7.44
H2S	<.002	>.004				
NITRITE	<.012	.2	0	0	0	0
NITRATE	<.12		.0587	.073	.106	.136
PH-FLD	6.8-8.5	<5,>9	6.5			
PH-LAB	**	**	6.8	6.6	6.7	6.7
PHOSPH.	<.05		0	.0066	.0144	.02
RESID.TOT	<2000					
RESID.FIL	70-400		11	11	19	22
RESID.N.F	<3		0	5	0	6
SALIN.						
SILICA	<10-60		.98	0	1.62	1.29
SULFATE	<90		0	2.7	2	3.1
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25	16			
TURBID	1-60	>1000	0	0	0	0
METALS--						
AL	<.1	>5	0		0	0
AS	<.5	>1	0		0	0
BA	<1		.0032		.0046	.0038
CA	4-150	>300	1.51		2.46	2.6
CD	<.0004		0		0	0
CO			0		0	0
CR	<.01		0		0	0
CU	<.006		0		0	0
FE	<.3		.136		.197	.16
HG	<.00005	>.0002	0		0	0
K		>50	.216		.297	.248
MG	<10	>100	.14		.16	.23
MN	<.05	>15	.0037		.0052	0
MO			0		0	0
NA		>500	0		.58	.71
NI			0		0	0
P			0		0	0
PB	<.01		0		0	0
SB			0		0	0
SE		>2.5	0		0	0
SI	<10-60		.84		1.45	1.48
SN			0		0	0
SR			.006		.0102	.0107
TI			.0077		.0085	0
V			0		0	0
ZN	<.005		.0012		0	0

WATER QUALITY VALUES FOR KENAMO
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	DEC08/79 KENAMO KR-1	DEC17/79 KENAMO KR-3	DEC16/79 KENAMO KR-4	AUG16/79 TRAIL-RACE	SEP13/79 TRAIL-RACE	OCT08/79 TRAIL-RACE	DEC17/79 TRAIL-RACE	SEP13/79 UP OF TRAILRC	OCT08/79 UP OF TRAILRC
ALK.TOT	20-300		17.8	9.46	19.8	16	16	17	18.2	3	3.8
AMMON.	<.002	>.08	0	.0055	0	0	.08	0	0	.04	.01
CO2	3-5	>20									
CHLOR.	<170	>400	0	0	0	.2	.1	.3	0	.1	.6
COLOR	<15		0	5	5	0	10	10	5	10	20
COND.FLD	150-2000		32	28	39				32		
COND.LAB	**		43.4	34.7	47.5	44	44	45	43.8	22	22
DO-PPM	>6-8	<4	12.6	13.2	12.8		10.4	11.4	12.6	10.9	11.4
DO-%SAT	100%		96.6	92.3	96.2				96.9		
DGAS.TOT	<101%	>110%	105.8	99.6	102				107		
DGAS.WIT	100%		108.2	101.5	103.5				109.7		
HARDNESS	20-400		19.5	12.9	21	17.3	39	18.6	19.2	6.1	7.1
H2S	<.002	>.004									
NITRITE	<.012	.2	0	0	0				0		
NITRATE	<.12		.0595	.218	.0565				.46		
PH-FLD	6.8-8.5	<5,>9	6.6	6.52	6.66				6.85		
PH-LAB	**	**	7	6.8	7	7.35		7.74	7.2		6.69
PHOSPH.	<.05		0	0	0	0	.02	0	0	.02	.02
RESID.TOT	<2000										
RESID.FIL	70-400		35	30	35				37		
RESID.N.F	<3		0	0	0				0		
SALIN.			0	0	0						
SILICA	<10-60		1.6	2.2	1.7	3.3	3	3.3	1.5	1	2.2
SULPATE	<90		2.8	5.55	3	2	0	2	2.7	0	4
TASTE	OK										
T.D.SOL	500-1000	15000									
TEMP.	6-18C	<2,>25	4.3	-1	3.5	10	11.5	10	3.7	7	7
TURBID	1-60	>1000	0	0	0	1.9		1	0		20
METALS—											
AL	<.1	>5	0	0	0		0	0	0	0	1.2
AS	<.5	>1	0	0	0		0	0	0	0	0
BA	<1		.0066	.0153	.0112		0	0	.0056	0	0
CA	4-150	>300	6.13	4.45	6.68		5.8	5.8	5.94	1.8	2.6
CD	<.0004		0	0	0		0	0	0	0	0
CO			0	0	0		0	0	0	0	0
CR	<.01		0	0	0		0	0	0	0	0
CU	<.006		0	0	0		3	2	0	3	6
FE	<.3		.019	.111	.048		.22	.07	.021	.72	1.7
HG	<.00005	>.0002	0	0	0			0	0		0
K		>50	.267	.619	.359		.32	.32	.275	.64	1
MG	<10	>100	1.02	.437	1.04		.8	.8	1.05	.4	.8
MN	<.05	>15	.0035	.0053	0		0	0	0	0	.04
MO			0	0	0		0	0	0	0	0
NA		>500	1.06	.748	.974		1.3	1	1.08	.48	.4
NI			0	0	0		0	2	0	0	1
P			0	0	0				0		
PB	<.01		0	0	0		2	4	0	1	16
SB			0	0	0		0	0	0	0	0
SE		>2.5	0	0	0		0	0	0	0	0
SI	<10-60		.98	1.76	1.15				.97		
SN			0	.4	0		0	0	0	0	0
SR			.029	.0201	.0304		0	0	.0292	0	0
TI			0	0	0				0		
V			0	0	0		0	0	0	0	0
ZN	<.005		.0064	.0012	0		4	13	.0017	6	15

WATER QUALITY VALUES FOR KEHANO (CON'T)
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	DEC06/79 1 HR DH-3	DEC07/79 24 HR DH-3	DEC08/79 36 HR DH-3	DEC10/79 75 HR DH-3	DEC11/79 124 HR DH-3	DEC12/79 WELL DH-3	DEC14/79 1HR DH-2	DEC15/79 24 HR DH-2	DEC16/79 48 HR DH-2	DEC17/79 72 HR DH-2	DEC18/79 89 HR DH-2
ALK.TOT	20-300		13.2	14	13.6	14	13.7	13.7	31.9	32.8	33.1	33.1	32.8
AMMON.	<.002	>.08	0	0	0	0	0	.0065	0	0	0	0	0
CO2	2-5	>20											
CHLOR.	<170	>400	.65	.65	.65	.65	.65	.65	.97	.8	.6	.75	.75
COLOR	<15		0	0	0	0	0	0	0	0	0	0	0
COND.FLD	150-2000		31	32	31	32	31		65	67	64	67	54
COND.LAB	**		41.7	41.9	42.1	42.3	42.3	42.4	83.5	84.2	85.1	86.5	87
DO-PPM	>6-8	<4	7.5	7.5	7.5	7.6	7.1		5.7	5.7	5.4	5.7	5.7
DO-%SAT	100%		58.6	58.6	58.6	58.5	55.9		43.8	44.2	46.6	46.3	46
DGAS.TOT	<103%	>110%	99.2	98	98	97.9	99.2		98.7	96.9	98.3	98.9	98.8
DGAS.BIT	100%		110	108.5	108.5	108.4	110.7		113.3	110.9	112	112.9	112.8
HARDNESS	20-400		15.8	15.7	15.9	16.7	16.8	16.8	37.7	34.9	35.2	35.7	36.2
H2S	<.002	>.004											
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.207	.205	.218	.21	.208	.208	.283	.25	.241	.225	.219
PH-FLD	6.8-8.5	<5,>9	6.3	6.1	6	5.9	5.8		6.16	6.13	6.35	6.35	6.2
PH-LAB	**	**	6.3	6.3	6.4	6.7	6.6	6.8	6.7	6.6	6.6	6.6	6.6
PHOSPH.	<.05		0	0	0	0	0	0	0	0	0	0	0
RESID.TOT	<2000												
RESID.FIL	70-400		36	35	35	35	31	34	54	61	59	59	59
RESID.N.F	<3		0	0	0	0	0	0	0	0	0	0	0
SALIN.			0	0	0	0	0	0	0	0	0	0	0
SILICA	<10-60		3.5	3.51	3.5	3.56	3.57	3.58	3.92	3.6	3.5	3.4	3.36
SULFATE	<90		3.9	3.95	3.95	4.2	4.1	4.35	5.38	5.9	6.19	6.63	7
TASTE	OK												
T.D.SOL	500-1000	15000											
TEMP.	4-18C	<2,>25	5	4.9	5	5	5		5.4	5.4	5.4	5	5.5
TURBID	1-60	>1000	0	0	0	0	0	0	1.4	0	0	86.5	0
METALS—													
AL	<.1	>5	0	0	0	0	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0
BA	<1		.0167	.0163	.01666	.0167	.0169	.0169	.0452	.0429	.0423	.0421	.0424
CA	4-150	>300	5.48	5.45	5.52	5.82	5.87	5.86	13.5	12.4	12.5	12.7	12.9
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	0	0	0	0
FE	<.3		.017	0	0	0	0	0	.074	.017	0	0	0
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0	0
K		>50	.672	.68	.673	.686	.682	.68	1.17	1.13	1.11	1.12	1.12
MG	<10	>100	.513	.516	.514	.522	.523	.521	.978	.967	.961	.962	.968
MN	<.05	>15	.0038	0	0	0	0	0	.0069	0	0	0	0
MO			0	0	0	0	0	0	0	0	0	0	0
NA		>500	138	1.32	1.45	1.33	1.35	1.34	1.63	1.57	1.82	1.97	2.13
NI			0	0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0	0
PB	<.01		.001	0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60		2.89	2.83	2.93	3.07	3.12	3.1	3.42	3.1	3.01	2.94	2.95
SN			0	0	0	0	0	0	0	0	.4	0	.22
SR			.029	.0289	.0286	.0284	.0257	.0282	.0505	.0501	.0501	.0508	.0504
TI			0	0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0	0
ZN	<.005		.0058	.0058	.0029	.0016	.002	.0029	.0029	0	0	0	0

WATER QUALITY VALUES FOR KEMANO (CON'T)
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	DEC16/79 SEEDMAKIN CREEK	AUG16/79 HORSTSKY CREEK	SEP13/79 HORSTSKY CREEK	OCT08/79 HORSTSKY CREEK	AUG16/79 DOWN OF HORSTSKY	SEP13/79 DOWN OF HORSTSKY	OCT08/79 DOWN OF HORSTSKY	DEC17/79 HORSTSKY CREEK-2	DEC17/79 HORSTSKY CREEK-3
ALK.TOT	20-300		18.6	5	6	0.1	11	19	16	11.6	18.4
AMMON.	<.002	>.08	0	.22	.02	0	.02	.08	.01	0	.007
CO2	2-5	>20									
CHLOR.	<170	>600	0	.4	.1	.7	.4	.3	.4	0	.8
COLOR	<15		5	0	10	0	0	5	0	0	0
COND.FLD	150-2000		42							29	40
COND.LAB	**		54	21	26	27	16	50	43	36	54.2
DO-PPM	>6-8	<4	14.3		10	11.2		9.8	11	11.6	5.7
DO-SAT	100%		98.6							85.3	46.3
DOAB.TOT	<103%	>110%	100.4							98.4	99.1
DOAB.NIT	100%		100.9							101.9	113.2
HARDNESS	20-4[illegible]		22.9	5.82	8.8	8.3	12.3	21	17.3	14.5	20.7
H2S	<.002	>.004									
NITRITE	<.012	.2	0							0	0
NITRATE	<.12		.287							.333	.214
PH-FLD	6.8-8.5	<5,>9	6.8							6.45	6.03
PH-LAB	**	**	7.2	7.15		6.8	7.3		7.02	6.6	6.3
PHOSPH.	<.05		0	0	.02	.01	0	.03	.02	0	.0072
RESID.TOT	<2000										
RESID.FIL	70-400		40							31	66
RESID.V.F	<3		0							0	6
SALIN.			0							0	0
SILICA	<10-46		1.9	1.8	2	2.5	2.8	3	3.1	1.7	3.12
SULFATE	<90		5.8	2	0	2	2	0	2	3.78	4.87
TASTE	OK										
T.D.SOL	500-1000	15000									
TEMP.	4-18C	<3,>25	-1	11	8.5	8	9.5	10	9	2	9.3
TURBID	1-40	>1000	0	.41		.75	3.7		3.3	0	1.3
METALS--											
AL	<.1	>5	0		0	0		0	0	0	.095
AS	<.5	>1	0		0	0		0	3.1	0	0
BA	<1		.024		0	0		0	0	.0248	.0368
CA	4-150	>300	7.97		3.2	3.4		7.2	5.6	4.99	6.99
CD	<.0004		0		0	0		0	0	0	0
CO			0		0	0		0	0	0	0
CR	<.01		0		0	0		0	0	0	0
CU	<.006		0		3	2		3	2	0	0
FE	<.3		.017		.12	.07		.22	.12	.111	.468
HG	<.00005	>.0002	0			.1		0	0	0	0
K		>50	.658		.56	.48		.64	.48	.573	1.11
MG	<10	>100	.752		.3	.3		.8	.8	.486	.782
MN	<.05	>15	0		0	0		0	0	.0065	.0079
MO			0		0	0		0	0	0	0
NA		>500	.645		.72	.4		1.2	1	.691	1.36
NI			0		0	0		0	0	0	0
P			0							0	0
PB	<.01		0		1	5		2	4	0	0
SB			0		0	0		0	0	0	0
SE		>2.5	0		0	0		0	0	0	0
SI	<10-60		1.38							1.22	3.74
SN			0		0	0		0	0	0	0
SR			.035		0	0		0	0	.0231	.0332
TI			0							0	0
V			0		0	0		0	0	0	0
ZN	<.005		0		7	10		6	9	0	.0012

WATER QUALITY VALUES FOR KILDALA
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUL16/80 KILDALA RIVER	MAR11/81 KILDALA RIVER	APR04/81 KILDALA RIVER	MAY09/81 KILDALA RIVER	JUN12/81 KILDALA RIVER	2 JUN15/81 KILDALA RIVER	1 JUN15/81 KILDALA RIVER	JUL30/81 KILDALA RIVER
ALK.TOT	20-300		6.63	23.3	12.6	9.31	8.75	13.8	6.9	6.42
AMMON.	<.002	>.08	.0062	.005	.0081	0	.0101	.0128	0	.016
CO2	2-5	>20								
CHLOR.	<170	>600	0	.702	.58	0	0	0	0	.909
COLOR	<15									
COND.FLD	150-2000									
COND.LAB	**		20.5	50	41	31.6	25	30.0	17.3	20
DO-PPM	>6-8	<4								
DO-%SAT	100%									
DGAS.TOT	<103%	>110%								
DGAS.HIT	100%									
HARDNESS	20-400		7.56	22.3	15.5	11.6	8.97	11.8	5.2	7.63
H2S	<.002	>.004								
NITRITE	<.012	.2	10	0	0	0	0	0	0	0
NITRATE	<.12		.0507	.19	.28	.22	.0944	.0507	.0136	.034
PH-FLD	6.8-8.5	<5,>9		9	7.5	7	7			
PH-LAB	**	**	6.7	7.6	7	7	7	7.3	6.9	7
PHOSPH.	<.05		.0146	0	.0741	.0055	0	.0062	0	.015
RESID.TOT	<2000									
RESID.FIL	70-400		20	42	35	23	22	26	16	19
RESID.N.F	<3		14	0	97	5	8	7	0	17
SALIN.										
SILICA	<10-40		1.06	2.06	1.9	1.61	1.31	1.31	1.11	.9
SULFATE	<90		3	4.4	5.3	3.85	3.8	2.2	1.8	2.7
TASTE	OK									
T.D.SOL	500-1000	15000								
TEMP.	4-18C	<2,>25		4.8	4.6	6.5	6.8			
TURBID	1-60	>1000	4.3	1.8	4.5	0	1.4	0	0	6.8
METALS--										
AL	<.1	>5	.271	0	.735	.12	.128	0	0	.503
AS	<.5	>1	0	0	0	0	0	0	0	0
BA	<1		.0243	.0213	.0471	.0218	.0188	.0104	.0089	.0241
CA	4-150	>300	2.47	7.54	4.61	3.86	2.98	4.05	1.85	2.2
CD	<.0004		0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0
CU	<.006		0	.001	.0022	0	0	.0016	.0019	.0011
FE	<.3		.339	.031	1.48	.224	.239	.239	.0216	.7
HG	<.00005	>.0002	.00087	0	0	0	0	0	0	0
K		>50	.526	.622	.946	.575	.57	.468	.554	.592
MG	<10	>100	.351	.838	.96	.48	.37	.41	.14	.52
MN	<.05	>15	.0043	0	.0343	.0086	.0071	0	0	.019
MO			0	0	0	0	0	0	0	0
NA		>500	.372	1.14	.89	.63	.51	.54	.52	.75
NI			0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0
SI	<10-40		1.4	2.19	2.99	1.61	1.33	1.18	.98	1.55
SN			0	0	0	0	0	0	0	0
SR			.0145	.0451	.0331	.0229	.0174	.0207	.02	.0137
TI			.0264	0	.104	.0108	.0165	0	0	.0788
V			0	0	0	0	0	0	0	0
ZN	<.005		.0015	.0014	.0071	.001	.0018	.002	.0045	.0027

WATER QUALITY VALUES FOR KITIMAT
(BELOW DETECTION LIMITS=0)

			JUL18/78 KITIMAT RIVER	NOV01/79 RIVER @ HATCHERY	NOV03/79 RIVER @ HATCHERY	APR07/80 ABOVE RIVER @ BRIDGE	APR08/80 RIVER @ BRIDGE	APR12/80 LOWER HIGHWAY BRIDGE	APR13/80 #1 WATER PT UNDER NAISLA	APR18/80 NAISLA BRIDGE	APR20/80 NAISLA BRIDGE	MAY06/80 NAISLA BRIDGE	MAY12/80 BRIDGE
ALK.TOT	20-300		12.3	51	15.4	12.5	7.28	14.4	13.3	8.87	10.9	11.3	9.76
AMMON.	<.002	>.08	0	0	0	.0071	.0081	.0068	.0041	.0095	.0055	.0038	.005
CO2	2-5	>20											
CHLOR.	<170	>400	0	2.56	1.71	1.27	1.54	1.22	.94	.85	.94	.59	.59
COLOR	<15			0									
COND.FLD	150-2000												
COND.LAB	**		27.9	152	45.5	40.	42.3	44.3	34.2	27.9	34.1	29.7	24.3
DO-PPM	>6-8	<4					11				11		
DO-SAT	100%						88				90		
DGAS.TOT	<103%	>110%											
DGAS.NIT	100%												
HARDNESS	20-400		11.3	67.3	16.7	16.1	16.8	18.1	14.4	16.5	13.7	15.9	11.7
H2S	<.002	>.004											
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.015	.321	.125	.112	.118	.117	.115	.132	.158	.154	.127
PH-FLD	6.8-8.5	<5,>9					6.5				7		
PH-LAB	**	**	7.2	8	7	7	6.6	6.9	7.1	6.9	6.8	7.1	7
PHOSPH.	<.05		.008	.0055	.005	.0242	.016	.0128	.0752	.318	.0178	.0839	.111
RESID.TOT	<2000		2%										
RESID.FIL	70-600		>19	101	37	33	44	28	31	30	35	24	21
RESID.N.F	<3		>10	0	0	26	8	17	83	308	11	85	144
SALIN.				0									
SILICA	<10-40			4.49	2.1	.91	2.24	1.17	1.04	1.23	1.92	1.19	1.13
SULFATE	<90		1.65	16.2	3.8	5.5	5.3	5.35	4.3	3	4.55	3.55	3
TASTE	OK												
T.D.SOL	500-1000	15000											
TEMP.	4-18C	<2,>25	11.2			3.5	2.79	3.5	4	3.5	7		5.5
TURBID	1-40	>1000	4	0	1.7	10	8.3	3.4	22	45	7.7	23	14
METALS—													
AL	<.1	>5		0	0	.222	.344	.144	.113	1.51	.35	.773	.392
AS	<.5	>1		0	0	0	0	0	0	0	0	0	0
BA	<1		.0112	.01	.0124	.0135	.0117	.0133	.0078	.0374	.0119	.0258	.015
CA	4-150	>300	3.83	24	5.54	5.54	5.92	6.28	4.9	5.68	4.54	5.39	4
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0
CO				0	0	0	0	0	0	0	0	0	0
CR	<.01			0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	.0019	0	0	0	0	0	0
FE	<.3		.208	.01	.249	.238	.414	.196	.146	1.03	.392	.708	.316
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0	0
K		>50		.983	.551	.514	.547	.473	.445	.439	.429	.374	.348
	80<10	>100	1.02	.437	1.04	.56	.8	.8	1.05	.4	.096		<10
MN	<.05	>15	.0035	.0053	0	.0186	0	0	0	0	.0488		<.05
MO			0	0	0	0	0	0	0	0	0	0	0
NA		>500		1.74	1.56	1.6	1.54	1.71	1.24	1.14	.984	.872	.687
NI				0	0	0	0	0	0	0	0	0	0
P				0	0	0	0	0	0	.36	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0	0
SB				0	0	0	0	0	0	0	0	0	0
SE		>2.5		0	0	0	0	0	0	0	0	0	0
SI	<10-60		1.18	4.66	2.28	.67	2.53	.51	1.05	2.13	2.04	1.63	1.35
SN			0	.4	0	0	0	0	0	0	OSN		0
SR			.029	.0201	.0304	.0267	0	0	.0292	0	USR		.0214
TI			0	0	0	0	.0096	0	0	.0284	.01171		.0188
V			0	0	0	0	0	0	0	0	UV		0
ZN	<.005		.0064	.0012	0	0	.0033	0	0	0	0	0	0

WATER QUALITY VALUES FOR KITIMAT
(BELOW DETECTION LIMITS=0)

			MAY26/80 RIVER @ BRIDGE	MAY29/80 RIVER @ BRIDGE	JUN06/80 RIVER @ BRIDGE	JUN24/80 RIVER @ BRIDGE	JUL05/80 RIVER @ BRIDGE	JUL20/80 RIVER @ BRIDGE	AUG10/80 RIVER @ BRIDGE	AUG11/80 RIVER @ BRIDGE	AUG17/80 RIVER @ BRIDGE	AUG19/80 RIVER @ BRIDGE	AUG20/80 KITIMAT RIVER
ALK.TOT	20-300		10	9.36	12.1	10.6	9.09	10.8	8.59	12.2	15.2	13.5	12.5
AMMON.	<.002	>.08	0	.0122	.01	0	.005	.016	.0052	.0072	.011	.011	.0092
CO2	3-5	>20											
CHLOR.	<170	>400	0	0	1.11	1.13	.72	0	.61	.5	.77	.65	1
COLOR	<15												
COND.FLD	150-2000												
COND.LAB	**		29.3	24.8	33.5	27.7	23.9	28.7	21.3	30.8	35.2	34.8	36
DO-PPM	>6-8	<4	11			11		11				11	
DO-SAT	100%		97.5			96.5		95.5				104	
DGAS.TOT	<103%	>110%											
DGAS.BIT	100%												
HARDNESS	20-400		12.7	11.1	13.9	10.8	14.8	12.9	10.2	13.2	16.7	16.1	15.1
H2S	<.002	>.004											
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.0736	.046	.0208	.0235	.0282	0	.0325	.0158	.0303	.039	.0404
PH-FLD	6.8-8.5	<5,>9				7		7				7.5	
PH-LAB	**	**	7	7	7.1	7	7.1	7	6.9	7.1	7.2	7	6.9
PHOSPH.	<.05		.0085	.015	.0123	.0065	.0673	.0059	.0202	.0168	.176	.0087	.0068
RESID.TOT	<2000												
RESID.FIL	70-400		26	17	25	23	18	22	16	20	27	24	25
RESID.N.F	<3		9	24	15	0	97	9	38	23	357	11	0
SALIN.													
SILICA	<10-60		1.44	.95	1.1	0	1.22	1.27	.8	1.25	2.91	1.49	1.59
SULFATE	<90		2.9	1.9	2.2	2.8	2.1	2	1.7	2.1	2.6	2.8	3.1
TASTE	OK												
T.D.SOL	500-1000	15000											
TEMP.	4-18C	<2,>25	10.5	7	9	10	8.25	13.5	14	14	9	13	
TURBID	1-40	>1000	4.3	4.7	6.6	2.6	20	6.3	5.6	5.6	70	6.1	6.9
METALS--													
AL	<.1	>5	.194	.127	.397	.146	1.6	.276	.654	0	.266	.426	.195
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0
BA	<1		.0093	.0096	7.0259	.0111	7.0434	.0123	7.0224	.01	.0148	.0151	.0125
CA	4-150	>300	4.42	3.86	4.64	3.7	4.2	4.48	3.23	4.68	5.94	5.48	5.17
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	0	0	.0039	0
FE	<.3		.216	.113	.452	.165	1.74	.27	.639	.046	.213	.427	.264
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0	0
K		>50	.355	.334	.525	.356	.566	.418	.326	.41	.47	.534	.512
	>100	.732	>100	.2	.3	.561	.8	.8	.486	.782	.371	.448	.597	.543
	>15	0	>15	0	0	.0163	0	0	.0065	.0079	.0068	.0065	.0298	.0134
MO				0	0	0	0	0	0	0	0	0	0	0
NA			>500	.788	.851	1.03	.777	.753	1.02	.596	.74	.597	.977	1.1
NI				0	0	0	0	0	0	0	0	0	0	0
P				0	0	0	0	0	0	0	0	0	0	0
PB	<.01			0	0	0	0	0	0	0	0	0	0	0
SB				0	0	0	0	0	0	0	0	0	0	0
SE		>2.5		0	0	0	0	0	0	0	0	0	0	0
SI	1.38		1.76	.91	1.84	1.68	3.32	1.22	2.74	1.2	1.51	1.82	1.76
SN	0			0	0	0	0	0	0	0	0	0	0	0
SR	.035			0	0	.0226	0	0	.0231	.0332	.02	.0229	.026	.0261
TI	0			0	0	.0241	.0087	.0734	0	0	0	.0132	.0194	.0103
V	0			0	0	0	0	0	0	0	0	0	0	0
ZN	<.005			0	.0018	0	.0022	0	.0046	0	0	0	.02	0

WATER QUALITY VALUES FOR KITIMAT
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	MAY25/78 36 HRS	JUL18/78 1 HR	JUL18/78 2.75 HRS
ALK.TOT	20-300		22	14.2	17.6
AMMON.	<.002	>.08		.0246	.0239
CO2	2-5	>20		54.2	47.5
CHLOR.	<170	>400	9	3.63	3.75
COLOR	<15				
COND.FLD	150-2000				
COND.LAB	"		63	51.5	51
DO-PPM	>6-8	<4		.6	.7
DO-%SAT	100%			.5	6
DGAS.TOT	<103%	>110%			
DGAS.WIT	100%			121	113
HARDNESS	20-400		19	11.2	11.6
H2S	<.002	>.004			
NITRITE	<.012	.2		0	0
NITRATE	<.12		0	.01	.012
PH-FLD	6.8-8.5	<5,>9		5.6	5.6
PH-LAB	"	"	6.5	6.3	6.3
PHOSPH.	<.05			0	0
RESID.TOT	<2000			39	40
RESID.FIL	70-400		51	>29	>30
RESID.N.F	<3				
SALIN.					
SILICA	<10-60				
SULFATE	<90		9	1.55	1.62
TASTE	OK				
T.D.SOL	500-1000	15000			
TEMP.	4-18C	<2,>25	5.4	6.1	6.1
TURBID	1-40	>1000		0	0
METALS--					
AL	<.1	>5			
AS	<.5	>1			
BA	<1			.0144	.0142
CA	4-150	>300		3.55	3.65
CD	<.0004			0	0
CO					
CR	<.01				
CU	<.006		0	0	0
FE	<.3		3.93	2.46	2.43
HG	<.00005	>.0002		0	0
K		>50			
MG	<10	>100	1	.56	.6
MN	<.05	>15		.216	.223
MO					
NA		>500			
NI					
P					
PB	<.01			0	0
SB					
SE		>2.5			
SI	<10-60			4.35	4.35
SN					
SR				.0249	.0237
TI					
V					
ZN	<.005		0	0	0

WATER QUALITY VALUES FOR KITIMAT
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	OCT27/79 KITIMAT WELL79-1	OCT28/79 KITIMAT WELL79-1	OCT29/79 KITIMAT WELL79-1	OCT30/79 KITIMAT WELL79-1	NOV03/79 KITIMAT WELL79-1	NOV04/79 KITIMAT WELL79-1	NOV05/79 KITIMAT WELL79-1	APR01/80 KITIMAT WELL79-1	APR08/80 KITIMAT WELL79-1	APR15/80 KITIMAT WELL79-1	APR22/80 KITIMAT WELL79-1	APR29/80 KITIMAT WELL79-1
ALK.TOT	20-300		50.7	51.2	51	51.8	50.7	50.7	50.1	49				51.5
AMMON.	<.002	>.08	0	0	0	0	0	0	0	0				0
CO2	2-5	>20												
CHLOR.	<170	>400	2	2.4	2.56	2.56	2.91	2.91	2.73	3.19				3.76
COLOR	<15		0	0	0	0	0	0	0					
COND.FLD	150-2000		142	150	153	145	153	153	152					
COND.LAB	**		138	150	152	152	153	153	153	130				159
DO-PPM	>6-8	<4	7.5	6.8	7	6.3	6.3	6.5	6.4		6	5	6	6
DO-%SAT	100%		62	56	58	53	53	54	54					
DGAS.TOT	<103%	>110%	106	106	105	105	106	104	104					
DGAS.NIT	100%		120	119	118	118	119	118	117					
HARDNESS	20-400		62.7	66.8	67.3	67	66.3	66.3	65.4	57.9	71.6	51.8	72	70
H2S	<.002	>.004												
NITRITE	<.012	.2	0	0	0	0	0	0	0	.0185				0
NITRATE	<.12		.317	.282	.321	.321	.297	.3	.22	.455				.337
PH-FLD	6.8-8.5	<5,>9	7.7	8.1	7.9	8.2	8.2	8	7.8					
PH-LAB	**	**	8	8	8	8	8	8	7.9	7.9				8.1
PHOSPH.	<.05		.005	.0053	.0055	.005	.005	.0055	.005	.0108				.0081
RESID.TOT	<2000													
RESID.FIL	70-400		88	95	101	101	101	100	97	84				98
RESID.N.F	<3		0	0	0	0	0	0	0	10				0
SALIN.			0	0	0	0	0	0	0					
SILICA	<10-60		4.52	4.52	4.49	4.49	4.51	1.83	4.6	5.07				4.65
SULFATE	<90		12.5	15.4	16.2	16	16.6	17.4	17.3	9.7				16
TASTE	OK		OK	OK	OK	OK	OK	OK	OK					
T.D.SOL	500-1000	15000												
TEMP.	4-18C	<2,>25	6.4	6.4	6.6	6.6	6.4	6.4	6.4	6	6	6.25	6	
TURBID	1-60	>1000	0	0	0	0	0	0	0	7.2				0
METALS--														
AL	<.1	>5	0	0	0	0	0	0	0	.21	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0	0
BA	<1		.009	.0101	.01	.0102	.0101	.0097	.0101	.0145	.0114	.0082	.0113	.011
CA	4-150	>300	22.4	23.8	24	23.9	23.6	23.6	23.2	20.6	25.7	18.6	25.8	25.1
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	0	.055	0	0	0
FE	<.3		.012	0	.01	0	0	0	0	.191	.0027	.0028	0	0
HG	<.00005	>.0002	0	0	0	0	0	0	0	2.37	0	0	0	0
K		>50	.956	.97	.983	1	.997	1.01	.997	1.02	1.05	.781	1.05	1.02
MG	<10	>100	1.65	1.78	1.78	1.78	1.78	1.79	1.81	1.56	1.8	1.29	1.83	1.78
MN	<.05	>15	0	0	0	0	0	0	0	.0412	0	0	0	0
MO			0	0	0	0	0	0	0	0	0	0	0	0
NA		>500	1.62	1.66	1.74	1.69	1.75	1.79	1.75	1.35	1.67	1.22	1.82	1.7
NI			0	0	0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	.0181	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60		4.63	4.59	4.66	4.55	4.62	4.66	4.57	5.83	4.54	3.28	4.65	4.44
SN			0	0	0	0	0	0	0	0	0	0	0	0
SR			.0674	.0725	.073	.0727	.0738	.0739	.0736	.0619	.0741	.0543	.0763	.0743
TI			0	0	0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	.0034	.0022	0	.0013	0	.0011	13.8	.0133	.0044	.0059	.0074

WATER QUALITY VALUES FOR KITIMAT
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	MAY06/80 WELL79-1	MAY13/80 WELL79-1	MAY20/80 WELL79-1	MAY26/80 WELL79-1	JUL15/80 WELL79-1	JUL16/80 WELL79-1	AUG20/80 WELL79-1	AUG02/80 WELL 80-1	AUG03/80 WELL 80-1	AUG20/80 WELL 80-1
ALK.TOT	20-300					55		61.3	52.8	14.5	12.6	14.7
AMMON.	<.002	>.08				0			0	.0184	.0156	0
CO2	2-5	>20										
CHLOR.	<170	>600				4		4.2	5.37	1.7	1.52	1.36
COLOR	<15											
COND.FLD	150-2000											32
COND.LAB	**					170		180	180	45	45	41
DO-PPM	>6-8	<4	6	6	6		4.5			8.7	8.5	7.2
DO-%SAT	100%									70	69	58
DGAS.TOT	<103%	>110%								100		101.2
DGAS.NIT	100%									109	109	112.6
HARDNESS	20-400		77.6	79.3	80.4	76	77.1	77.1	80.1	18.4	16.5	16.5
H2S	<.002	>.004										
NITRITE	<.012	.2				0		0	.0236	0	0	0
NITRATE	<.12					.024		.22	.245	.15	.146	.114
PH-FLD	6.8-8.5	<5,>9								6.5	6.4	5.7
PH-LAB	**	**				8	8	8	7.8	6.4	6.4	6.3
PHOSPH.	<.05					.008		.009	.0051		.0098	0
RESID.TOT	<2000											
RESID.FIL	70-400					110		121	116	34	34	35
RESID.N.F	<3					0		0	0	49	0	0
SALIN.												
SILICA	<10-60					4.84		5.04	4.85	3.36	3.25	3.26
SULFATE	<90					15.6		14.9	24.3	4	4	4.55
TASTE	OK											
T.D.SOL	500-1000	15000										
TEMP.	4-18C	<2,>25	6	6	6	6	6			6.2	6.2	6.4
TURBID	1-40	>1000				0		0	0	23	4.4	0
METALS--												
AL	<.1	>5	0	0	0	0	0	0	0	.361	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0
BA	<1		.011	.012	.012	.012		.029	.0122	.0159	.0064	.0055
CA	4-150	>300	28.1	28.7	29.1	27.3	27.5	27.5	28.6	6.22	5.58	5.63
CD	<.0004		0	0	0	0		0	0	.0017	0	0
CO			0	0	0	0		0	0	0	0	0
CR	<.01		0	0	0	0		0	0	0	0	0
CU	<.006		.0027	0	0	0		0	.007	.035	0	0
FE	<.3		0	0	0	0	0	0	.014	.652	0	.014
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0
K		>50	1.07	1.1	1.1	1.1		1.18	1.2	.708		.559
MG	<10	>100	1.81	1.85	1.88	1.9		2.04	2.11	.694	.624	.602
MN	<.05	>15	0	0	0	0		0	0	.0422	.0201	.0056
MO			0	0	0	0		0	0	0	0	0
NA		>500	1.92	1.97	1.89	2		1.96	2.16	1	1.59	1.59
NI			0	0	0	0		0	0	0	0	0
P			0	0	0	0		0	0	0	0	0
PB	<.01		0	0	0	0		0	0	0	0	0
SB			0	0	0	0		0	0	0	0	0
SE		>2.5	0	0	0	0		0	0	0	0	0
SI	<10-60		4.78	4.83	4.74	4.86		4.73	4.77			3.19
SN			0	0	0	0		0	0	0	0	0
SR			.08	.09	.09	.09		.1	.0888	.0321	.0302	.0299
TI			0	0	0	0		0	0	.0123	0	0
V			0	0	0	0		0	0	0	0	0
ZN	<.005		.005	.008	.009	.009		.008	.002	.017	0	0

WATER QUALITY VALUES FOR KITIMAT
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	APR10/84 1930 WELL84-1	APR11/84 0445 WELL84-1	APR11/84 1700 WELL84-1	APR12/84 1700 WELL84-1	APR11/84 KITIMAT RIVER
ALK.TOT	20-300		64	65	65	63	14
AMMON.	<.002	>.08	.005	.006	.005	0	0
CO2	3-5	>20					
CHLOR.	<170	>400	18.8	16.7	15.8	15.7	1.4
COLOR	<15						
COND.FLD	150-2000		224	224	231	233	18
COND.LAB	**		344	349	352	364	44
DO-PPM	>6-8	<4	.25	.25	.25	.3	12.1
DO-%SAT	100%		2.1	2.1	2.1	2.5	97
DGAS.TOT	<103%	>110%	102.35	101.6	101.7	101.8	102.15
DGAS.HIT	100%		129	128	128.1	128.4	103.5
HARDNESS	20-400		148	154	158	160	16.8
H2S	<.002	>.004					
NITRITE	<.012	.2	0	0	0	0	0
NITRATE	<.12		.03	.03	.04	.03	.12
PH-FLD	6.8-8.5	<5,>9	7.05	7.05	7.2	7	6.8
PH-LAB	**	**	7.9	7.9	8	7.8	7
PHOSPH.	<.05		0	0	0	0	0
RESID.TOT	<2000						
RESID.FIL	70-400		230	229	239	243	42
RESID.N.F	<3		0	0	0	0	0
SALIN.							
SILICA	<10-60						
SULFATE	<90		70.1	75.6	79.5	85.1	4.5
TASTE	OK						
T.D.SOL	500-1000	15000					
TEMP.	4-18C	<2,>25	7.6	7.55	7.7	7.7	5.7
TURBID	1-60	>1000					
METALS—							
AL	<.1	>5	0	0	0	0	.09
AS	<.5	>1	0	0	0	0	0
BA	<1		.028	.028	.028	.029	.013
CA	4-150	>300	50.8	52.9	54.3	54.6	5.7
CD	<.0004		0	0	0	0	0
CO			0	0	0	0	0
CR	<.01		0	0	0	0	0
CU	<.006		0	0	0	0	0
FE	<.3		.015	.019	.013	.014	.212
HG	<.00005	>.0002	0	0	0	0	0
K		>50	2.8	2.8	2.8	2.8	.53
MG	<10	>100	5.1	5.3	5.5	5.8	.6
MN	<.05	>15	.002	.002	.001	0	.015
MO			0	0	0	0	0
NA		>500	6.8	6.7	6.3	6	1.8
NI			0	0	0	0	0
P			0	0	0	0	0
PB	<.01		.003	.003	.003	.003	0
SB			0	0	0	0	0
SE		>2.5	0	0	0	0	0
SI	<10-60		4.7	4.8	4.8	4.9	2.5
SN			0	0	0	0	0
SR			.382	.399	.408	.419	.035
TI			0	0	0	0	0
V			0	0	0	0	0
ZN	<.005		0	.006	0	.003	0

WATER QUALITY VALUES FOR KITIMAT
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	EUROCAN APR01/81 PRE C	EUROCAN NOV19/81 PRE C	EUROCAN JAN12/82 PRE C	EUROCAN FEB25/82 PRE C	EUROCAN APR01/81 POST C	EUROCAN NOV19/81 POST C	EUROCAN JAN12/82 POST C	EUROCAN FEB25/82 POST C	EUROCAN JAN12/82 POST C	EUROCAN FEB25/82 POST C	EUROCAN APR01/81 INTAKE	EUROCAN NOV19/81 INTAKE
ALK.TOT	20-300		13.6	18			16.5	17.7					16.5	13.6
AMMON.	<.002	>.08	.0078	.019			.007	.011					.0054	.011
CO2	2-5	>20												
CHLOR.	<170	>400	1.09	1.84			1.29	1.78					1.33	1.51
COLOR	<15		25	15			15	15					15	30
COND.FLD	150-2000													
COND.LAB	**		38.7	50			47.5	51					47.3	39
DO-PPM	>6-8	<4												
DO-SAT	100%													
DGAS.TOT	<103%	>110%												
DGAS.HIT	100%													
HARDNESS	20-400		16	19.4	21	24.1	18	14.9	23.4	24.3	23.6	25.5	19	19.9
H2S	<.002	>.004												
NITRITE	<.012	.2	0	0			0	0					0	0
NITRATE	<.12		.093	.146			.093	.13					.09	.105
PH-FLD	6.8-8.5	<5,>9		7.2				7.2						7.1
PH-LAB	**	**	7.2				7.2						7.2	
PHOSPH.	<.05		.013	.0094			.0087	.0121					.0077	.0136
RESID.TOT	<2000													
RESID.FIL	70-400		47	47			42	44					44	40
RESID.N.F	<3		10	7			5	9					5	10
SALIN.				0				0						0
SILICA	<10-60		2.26	2.26			2.32	2.36					2.32	2.14
SULFATE	<90		3.1	5.75			4.4	5.85					4.1	5.1
TASTE	OK													
T.D.SOL	500-1000	15000												
TEMP.	4-18C	<2,>25												
TURBID	1-60	>1000	4	3.4			3.2	3.6					3	4.7
METALS--														
AL	<.1	>5	.283	.223	.12	.07	.277	.413	.064	.06	.081	.07	.346	.274
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0	0
BA	<1		.0112	.0147	.0173	.015	.011	.0158	.0164	.016	.0166	.016	.0131	.0145
CA	4-150	>300	5.42	6.6	6.99	7.7	6.22	4.88	7.88	7.7	7.94	8	6.77	6.73
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0	0	0
CU	<.006		0	.0037	.0025	.007	0	.0026	.0074	.001	.0038	.001	0	.0022
FE	<.3		.248	.337	.235	.192	.293	.544	.229	.194	.176	.39	.343	.412
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0	0	0
K		>50	.56	.572		.64	.57	.572		.64		.64	.528	.491
MG	<10	>100	.6	.71	.85	1	.6	.67	.91	1	.91	1.1	.51	.75
MN	<.05	>15	.0073	.017	.0309	.016	.0088	.0329	.0232	.016	.0207	.024	.0158	.0191
MO			0	0	0	0	0	0	0	0	0	0	0	0
NA		>500	1.27	1.82	3	3.2	1.25	1.54	2.83	3.2	2.87	3.4	1.04	1.81
NI			0	0	0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60		2.56	2.8	3	3.1	2.52	2.77	3.02	3.1	2.99	3.2	2.61	2.85
SN			0	0	0	0	0	0	0	0	0	0	0	0
SR			.031	.0387	.0431	.047	.0307	.0315	.0471	.047	.0469	.049	.0285	.0383
TI			.0101	.0049	.0114	0	.0089	.0077	.0114	0	.0113	0	.0129	.0046
V			0	0	0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	.0024	.0029	0	0		.0024	.008	.0049	0	0	.0014

WATER QUALITY VALUES FOR KITLOPE
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	AUG02/81 KITLOPE RIVER	AUG23/81 KITLOPE RIVER	SEP28/81 KITLOPE RIVER	SEP30/81 KITLOPE RIVER	SEP30/81 TSAYTIS RIVER	AUG02/81 TESHA RIVER	AUG23/81 TESHA RIVER	SEP28/81 TESHA RIVER	SEP30/81 TESHA RIVER	SEP30/81 KALITAN CREEK
ALK.TOT	20-300		5.85	8.36	6.25	6.56	13.3	3.41	4.38	2.41	2.41	2.22
AMMON.	<.002	>.08	0	.0051	.007	.0521	.017	.0057	.0071	.0095	.012	0
CO2	2-5	>20										
CHLOR.	<170	>400	0	.51	0	.78	.59	.82	.71	.53	0	.84
COLOR	<15											
COND.FLD	150-2000											
COND.LAB	**		13.1	11.6	20.5	218	31.5	8.1	6.8	6.5	5.8	5.59
DO-PPM	>6-8	<4	13	9	10	12		9	11	10	12	
DO-%SAT	100%											
DGAS.TOT	<103%	>110%										
DGAS.NIT	100%											
HARDNESS	20-400		5.59	5.41	7.47	6		1.86	2.17	2.01	2.0	
H2S	<.002	>.004										
NITRITE	<.012	.2	0	0	0	.018	.007	0	0	0	0	0
NITRATE	<.12		0	0	.024	.074	.12	0	0	.014	.047	.029
PH-FLD	6.8-8.5	<5,>9	6	6	6.5	6.5		6	6	6	6	
PH-LAB	**	**	7	6.8	6.9	6.7	7.2	6.7	6.8	6.1	6.1	6.1
PHOSPH.	<.05		.0073	.0167	0	.487	.066	.005	.0123	.0147	.0472	.0292
RESID.TOT	<2000											
RESID.FIL	70-400		7	10	21	34	32	0	0	11	18	16
RESID.N.F	<3		8	0	0	1160	70	0	13	0	49	39
SALIN.												
SILICA	<10-60		0	.81	1.66	1.48	1.03	0	.55	1.07	.75	.66
SULFATE	<90		0	0	1.6	1	0	0	0	0	0	0
TASTE	OK											
T.D.SOL	500-1000	15000										
TEMP.	4-18C	<2,>25	9.5	9	6.9	6.7		10.5	9.5	8	7.5	
TURBID	1-60	>1000	2	10	3.5	14.5	31	0	3.2	2.7	11	8.4
METALS—												
AL	<.1	>5	.332	.631	.257	7.79		.12	.352	.326	.907	
AS	<.5	>1	0	0	0	0		0	0	0	0	
BA	<1		.007	.0115	.0101	.104		.0038	.0076	.0056	.014	
CA	4-150	>300	1.82	1.71	2.63	2.08		.565	.573	.523	.553	
CD	<.0004		0	0	0	0		0	0	0	0	
CO			0	0	0	0		0	0	0	0	
CR	<.01		0	0	0	0		0	0	0	0	
CU	<.006		.0014	.0011	0	.0289		0	0	0	.0025	
FE	<.3		.28	.57	.271	6.5		.18	.411	.325	.828	
HG	<.00005	>.0002	0	0	0	.074		0	0	0	0	
K		>50	.257	.341		1.56		.188	.285		.4	
MG	<10	>100	.21	.32	.22	.2		.11	.18	.17	.37	
MN	<.05	>15	.0084	.0165	.0079	.208		.0041	.0095	.0071	.0197	
MO			0	0	0	0		0	0	0	0	
NA		>500	0	0	.54	.99		.67	0	0	0	
NI			0	0	0	0		0	0	0	0	
P			0	0	0	.49		0	0	0	0	
PB	<.01		0	0	0	.0033		0	0	0	0	
SB			0	0	0	0		0	0	0	0	
SE		>2.5	0	0	0	0		0	0	0	0	
SI	<10-60		1.26	1.61	1.53	10		.78	1.1	1.18	1.68	
SN			0	0	0	0		0	0	0	0	
SR			.0088	.0097	.0123	.0338		.0042	.0048	.0041	.0055	
TI			.0263	.0481	.0246	.373		.0182	.0394	.0338	.0796	
V			0	0	0	.022		0	0	0	0	
ZN	<.005		.0016	.0034	0	.0253		0	.0025	0	.0023	

WATER QUALITY VALUES FOR KOWESAS
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	AUG02/81 KOWESAS RIVER	AUG23/81 KOWESAS RIVER	SEP28/81 KOWESAS RIVER	SEP30/81 KOWESAS RIVER
ALK.TOT	20-300		3.41	3.41	3.37	3.86
AMMON.	<.002	>.08	0	.0063	.0093	.029
CO2	2-5	>20				
CHLOR.	<170	>400	0	0	0	.67
COLOR	<15					
COND.FLD	150-2000					
COND.LAB	**		6.8	7	9.05	10.1
DO-PPM	>6-8	<4	10	11	10	11
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.NIT	100%					
HARDNESS	20-400		2.95	4.11	3.91	4
H2S	<.002	>.004				
NITRITE	<.012	.2	0	0	0	.01
NITRATE	<.12		0	.027	.018	.049
PH-FLD	6.8-8.5	<5,>9	6	6	6	6
PH-LAB	**	**	6.7	6.7	6.4	6.4
PHOSPH.	<.05		.0067	.0109	.019	.1107
RESID.TOT	<2000					
RESID.FIL	70-400		0	5	11	21
RESID.N.F	<3		6	19	9	109
SALIN.						
SILICA	<10-60		0	.55	1.42	2.83
SULFATE	<90		0	0	0	0
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25	7.5	8.5	7.5	6
TURBID	1-60	>1000	1.7	8	3.7	69
METALS--						
AL	<.1	>5	.12	.785	.502	3.47
AS	<.5	>1	0	0	0	0
BA	<1		.0122	.0256	.0149	.13
CA	4-150	>300	.565	.887	1.07	1.25
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	0	0
CU	<.006		0	.0021	0	.0097
FE	<.3		.18	.979	.569	4.9
HG	<.00005	>.0002	0	0	0	0
K		>50	.333	.581		1.93
MG	<10	>100	.11	.46	.3	.21
MN	<.05	>15	.0062	.0131	.0087	.0652
MO			0	0	0	0
NA		>500	.67	0	0	.54
NI			0	0	0	0
P			0	0	0	0
PB	<.01		0	0	0	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		.78	1.7	1.39	5.79
SN			0	0	0	0
SR			.0042	.0046	.0055	.0104
TI			.0181	.12	.064	.578
V			0	0	0	0
ZN	<.005		.0021	.003	.002	.0134

TABLE I WATER QUALITY VALUES FOR KWALATE
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	SEP08/81 KWALATE RIVER
ALK.TOT	20-300		4.34
AMMON.	<.002	>.08	.0063
CO2	2-5	>20	
CHLOR.	<170	>400	.57
COLOR	<15		
COND.FLD	150-2000		
COND.LAB	**		14.4
DO-PPM	>6-8	<4	
DO-%SAT	100%		
DGAS.TOT	<103%	>110%	
DGAS.NIT	100%		
HARDNESS	20-400		4.22
H2S	<.002	>.004	
NITRITE	<.012	.2	0
NITRATE	<.12		.126
PH-FLD	6.8-8.5	<5,>9	
PH-LAB	**	**	6.6
PHOSPH.	<.05		0
RESID.TOT	<2000		
RESID.FIL	70-400		14
RESID.N.F	<3		0
SALIN.			
SILICA	<10-60		1.71
SULFATE	<90		2.3
TASTE	OK		
T.D.SOL	500-1000	15000	
TEMP.	4-18C	<2,>25	
TURBID	1-60	>1000	0
METALS--			
AL	<.1	>5	0
AS	<.5	>1	0
BA	<1		.0038
CA	4-150	>300	1.51
CD	<.0004		0
CO			0
CR	<.01		0
CU	<.006		0
FE	<.3		.0199
HG	<.00005	>.0002	0
K		>50	.305
MG	<10	>100	.11
MN	<.05	>15	.0013
MO			0
NA		>500	.54
NI			0
P			0
PB	<.01		0
SB			0
SE		>2.5	0
SI	<10-60		1.6
SN			0
SR			.0055
TI			.0087
V			0
ZN	<.005		0

WATER QUALITY VALUES FOR LEMIEUX
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	MAY04/82 LEMIEUX CREEK	JUN02/82 LEMIEUX CREEK	JUL06/82 LEMIEUX CREEK	JUL28/82 LEMIEUX CREEK
ALK.TOT	20-300		116	75	83	89
AMMON.	<.002	>.08	0	.007	0	0
CO2	2-5	>20				
CHLOR.	<170	>400	.6	0	.5	0
COLOR	<15		7			
COND.FLD	150-2000					
COND.LAB	**		257	172	180	196
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.NIT	100%					
HARDNESS	20-400		131	85.6	89.8	95.3
H2S	<.002	>.004				
NITRITE	<.012	.2	.007	.007	0	.007
NITRATE	<.12		.1	.03	.05	.12
PH-FLD	6.8-8.5	<5,>9	6.3			
PH-LAB	**	**	8.2	8	8.1	8
PHOSPH.	<.05		.013	.022	.046	.008
RESID.TOT	<2000					
RESID.FIL	70-400		172	112	122	131
RESID.N.F	<3		7	22	26	7
SALIN.						
SILICA	<10-60		6.9	6.1	6.4	6.2
SULFATE	<90		14.9	8.4	9.6	8.9
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25	5.5			
TURBID	1-60	>1000	2	10.7	8	.8
METALS--						
AL	<.1	>5	0	.18	.15	.5
AS	<.5	>1	0	0	0	0
BA	<1		.02	.017	.02	.02
CA	4-150	>300	42.7	28.3	29.5	31.5
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	0	0
CU	<.006		0	0	.002	.001
FE	<.3		.115	.189	.258	.093
HG	<.00005	>.0002	0	0	0	0
K		>50	.83	.71	.76	.88
MG	<10	>100	5.8	3.2	3.6	3.9
MN	<.05	>15	.006	.013	.021	.008
MO			0	0	0	0
NA		>500	2.4	1.7	1.8	2
NI			0	0	0	0
P			0	0	0	.06
PB	<.01		0	0	0	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		4.7	4.6	4.5	4.4
SN			0	0	0	0
SR			.194	.136	.139	.15
TI			0	.012	.008	.002
V			0	0	0	0
ZN	<.005		0	0	0	.002

WATER QUALITY VALUES FOR LION
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUL29/81 LION CREEK	AUG25/81 LION CREEK	SEP30/81 LION CREEK	OCT13/81 LION CREEK
ALK.TOT	20-300		34.4	42.9	44.3	31.2
AMMON.	<.002	>.08	0	.0057	.0079	0
CO2	2-5	>20				
CHLOR.	<170	>400	0	.55	0	0
COLOR	<15					
COND.FLD	150-2000					
COND.LAB	**		75	92.5	96	73.5
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.NIT	100%					
HARDNESS	20-400		32.3	41.3	42.3	31.4
H2S	<.002	>.004				
NITRITE	<.012	.2	0	0	0	0
NITRATE	<.12		.05	.102	.146	.198
PH-FLD	6.8-8.5	<5,>9				
PH-LAB	**	**	7.5	7.8	7.6	7.5
PHOSPH.	<.05		0	0	0	0
RESID.TOT	<2000					
RESID.FIL	70-400		52	58	63	58
RESID.N.F	<3		5	0	0	0
SALIN.						
SILICA	<10-60		2.87	3.12	3.22	2.14
SULFATE	<90		3.3	4.2	3.55	7.15
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25				
TURBID	1-60	>1000	0	0	0	1.6
METALS--						
AL	<.1	>5	0	.096	0	.066
AS	<.5	>1	0	0	0	0
BA	<1		.0118	.0133	.0138	.0104
CA	4-150	>300	11.1	14.1	14.5	10.6
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	0	0
CU	<.006		0	0	0	0
FE	<.3		.042	.123	.0268	.0413
HG	<.00005	>.0002	0	0	0	0
K		>50	.643	.722	.768	.64
MG	<10	>100	1.11	1.48	1.49	1.2
MN	<.05	>15	.0053	.008	.0031	.0023
MO			0	0	0	0
NA		>500	1.13	1.41	1.48	1.21
NI			0	0	0	0
P			0	0	0	0
PB	<.01		0	0	0	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		2.74	3.22	3.05	2.84
SN			0	0	0	0
SR			.107	.124	.131	.0958
TI			0	0	0	.0094
V			0	0	0	0
ZN	<.005		.0049	.0016	0	.001

WATER QUALITY VALUES FOR MAHOOD
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	MAR27/81 MAHOOD RIVER	JUN22/81 MAHOOD RIVER	APR27/82 MAHOOD RIVER	OCT23/82 MAHOOD RIVER	SEP14/83 0 HRS RIVER	JAN31/84 1340 HRS RIVER	MAXIMUM	MINIMUM	MEAN
ALK.TOT	20-300		53.6	50.2	52	53	49	50	53	49	50.84
AMMON.	<.002	>.08	.0078	.0112	.006	.005	.007	0	.0112	0	.00584
CO2	2-5	>20							0	0	
CHLOR.	<170	>400	0	.58	0	.5	.6	0	.6	0	.336
COLOR	<15				5				5	0	5
COND.FLD	150-2000		67				85	62	85	0	73.5
COND.LAB	**		117	110	115.5	112	108	113.2	115.5	108	111.74
DO-PPM	>6-8	<4	12.9				7.9	14.1	14.1	0	11
DO-%SAT	100%		103.1				83.9	108	108	0	95.95
DGAS.TOT	<103%	>110%	103					102.4	102.4	0	102.4
DGAS.HIT	100%		103					100.9	100.9	0	100.9
HARDNESS	20-400		52	47.9	52.1	49.8	50.1	52.9	52.9	47.9	50.56
H2S	<.002	>.004							0	0	
NITRITE	<.012	.2	0	0	.005	0	0	0	.005	0	.001
NITRATE	<.12		.0482	.0595	.04	.04	.03	.06	.06	.03	.0459
PH-FLD	6.8-8.5	<5,>9	8.1				7	7.15	7.15	0	7.075
PH-LAB	**	**	8.1	8	7.9	7.9	7.7	7.7	8	7.7	7.84
PHOSPH.	<.05		.011	0	.005	.005	.007	.004	.007	0	.0042
RESID.TOT	<2000								0	0	
RESID.FIL	70-600		81	74	85	82	80	94	94	74	83
RESID.N.F	<3		0	0	0	0	0	0	0	0	0
SALIN.									0	0	
SILICA	<10-60		2.78	3.25	3.3	2.6			3.3	0	3.05
SULFATE	<90		4.5	5.6	5.6	4.5	6	4.7	6	4.5	5.28
TASTE	OK								0	0	
T.D.SOL	500-1000	15000							0	0	
TEMP.	4-18C	<2,>25	4				15.1	2.3	15.1	0	8.7
TURBID	1-60	>1000	0	0	0	0	0	0	0	0	0
METALS--									0	0	
AL	<.1	>5	0	0	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0
BA	<1		.0079	.0084	.009	.009	.009	.009	.009	.0084	.00868
CA	4-150	>300	14.16	13	14.1	13.7	13.2	14.5	14.5	13	13.7
CD	<.0004		0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0
CU	<.006		.0012	0	0	0	0	0	0	0	0
FE	<.3		.0083	.0184	.018	.019	.015	.015	.019	.015	.01708
HG	<.00005	>.0002	.00377	0	0	0	0	0	0	0	0
K		>50	.946	.813	.86	.91	.899	1.13	1.13	.813	.9224
MG	<10	>100	4.04	3.76	4.1	3.8	4.1	4	4.1	3.76	3.952
MN	<.05	>15	0	0	0	0	.015	0	.015	0	.003
MO			0	0	0	0	0	.005	.005	0	.001
NA		>500	2.57	2.91	2.9	2.9	3.1	3.1	3.1	2.9	2.982
NI			0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0
SI	<10-60		2.81	3.15	3.1	3.2	2.8	3.4	3.4	2.8	3.13
SN			0	0	0	0	0	0	0	0	0
SR			.073	.0745	.081	.007	.077	.091	.091	.007	.0861
TI			0	.0053	0	0	0	0	.0053	0	.00106
V			0	0	0	0	0	0	0	0	0
ZN	<.005		0	0	0	0	.01	0	.01	0	.002

WATER QUALITY VALUES FOR MAHOOD—Continued
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	MAR26/81 1000 HR WELL #3	MAR26/81 2200 HR WELL #3	MAR27/81 900HR WELL #3	MAR29/81 0900 HR WELL #3	MAR29/81 2130 HR WELL #3	MAR30/81 0800 HR WELL #3	JUN22/81 MAHOOD WELL #3	OCT23/82 MAHOOD WELL #3	SEP14/83 6 HRS WELL #3	JAN31/84 1530 HRS WELL #3	MAXIMUM	MINIMUM	MEAN
ALK.TOT	20-300		57.3	56	56.9	57.4	57.9	57.4	58.5	63.5	60	56	63.5	56	58.09
AMMON.	<.002	>.08		0	.0051	0	0	0	0	.012	.01	.005	.012	0	.0035667
CO2	2-5	>20											0	0	
CHLOR.	<170	>400		.61	.68	.65	.68	.66	.66	.9	1.4	.6	1.4	0	.76
COLOR	<15												0	0	
COND.FLD	150-2000		78	75	85	72	70	75			85	87	87	0	78.375
COND.LAB	**			128	130	132	130	131	130	134	132	124.7	134	0	130.1889
DO-PPM	>6-8	<4	7.9	7.8	7.3	7.1	7.1	7.1			2.3	5.8	7.9	0	6.55
DO-SAT	100%		70.9	69.5	65.5	64.8	64.5	64.3			20.2	52.5	70.9	0	59.025
DGAS.TOT	<103%	>110%	103.3	101.8	102.5	102.2	101.3	102.8			88.9	98.7	103.3	0	100.1875
DGAS.HIT	100%		111.9	110.4	112.4	112.2	111	113			107.5	111	113	0	111.175
HARDNESS	20-400			54	58	58	56	56	54.3	59.8	61.4	57	61.4	0	57.16667
H2S	<.002	>.004											0	0	
NITRITE	<.012	.2		0	0	0	0	0	0	0	.006	0	.006	0	6.667E-4
NITRATE	<.12			.0878	.0907	.0865	.0889	.0898	.144	.12	.13	.11	.144	0	.1053
PH-FLD	6.8-8.5	<5,>9	7.4	7.4	7.5	7.3	7.7	7.4			7.1	6.5	7.7	0	7.2875
PH-LAB	**	**		7.4	7.5	7.5	7.6	7.4	7.5	7.3	6.7	7.5	7.6	0	7.377778
PHOSPH.	<.05			.011	.011	.011	.011	.012	.0054	.008	.28	.006	.28	0	.0394889
RESID.TOT	<2000												0	0	
RESID.FIL	70-400			86	84	85	87	88	80	96	93	91	96	0	87.77778
RESID.N.F	<3			0	0	0	0	0	0	0	0	0	0	0	0
SALIN.													0	0	
SILICA	<10-60		3.47	3.47	3.41	3.45	3.62	3.62	3.61	2.9			3.62	0	3.44375
SULFATE	<90			5.7	5.4	5.7	5.7	5.6	5.6	4.7	6.3	5.1	6.3	0	5.533333
TASTE	OK												0	0	
T.D.SOL	500-1000	15000											0	0	
TEMP.	4-18C	<2,>25	8.6	8.5	8.8	8.8	8.6	8.6		7	7.3	8.5	8.8	0	8.3
TURBID	1-60	>1000	0	0	0	0	0	0	1.8	1.5	3.4	0	3.4	0	.67
METALS—													0	0	
AL	<.1	>5		0	0	0	0	0	0	0	0	0	0	0	0
AS	<.5	>1		0	0	0	0	0	0	0	0	0	0	0	0
BA	<1			.0048	.0046	.0049	.0043	.0042	.0042	.005	.005	.005	.005	0	.0046667
CA	4-150	>300		15.9	17.44	17.3	16.26	16.3	14.9	16.3	16.7	15.8	17.44	0	16.32222
CD	<.0004			0	0	0	0	0	.0069	.007	.0005	.0006	.007	0	.0016667
CO				0	0	0	0	0	0	0	0	0	0	0	0
CR	<.01			0	0	0	0	0	0	0	0	0	0	0	0
CU	<.006			.0019	.0012	0	0	.0018	0	0	0	0	.0019	0	5.444E-4
FE	<.3			.0436	.0322	.014	.0073	.0114	.382	.595	.206	.166	.595	0	.1619444
HG	<.00005	>.0002		.00284	.00125	.00404	.00092	.00079	0	0	0	0	.00404	0	.0010933
K		>50		1.16	1.16	1.16	1.19	1.18	.954	1.18	1.08	1.3	1.3	0	1.151556
MG	<10	>100		3.47	3.51	3.59	3.74	3.72	4.15	4.3	4.7	4.1	4.7	0	3.92
MN	<.05	>15		0	0	0	0	0	.0426	.025	.01	.013	.0426	0	.0100667
MO				0	0	0	0	0	0	0	0	0	0	0	0
NA		>500		2.73	3.19	2.96	3.1	3.07	3.32	3.6	3.8	3.6	3.8	0	3.263333
NI				0	0	0		0	0	0	0	0	0	0	0
P				0	0	0	0	0	0	0	0	0	0	0	0
PB	<.01			0	0	0	0	0	0	0	0	0	0	0	0
SB				0	0	0	0	0	0	0	0	0	0	0	0
SE		>2.5		0	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60			3.36	3.43	3.52	3.68	3.62	3.4	3.8	4.1	4.2	4.2	0	3.678889
SN				0	0	0	0	0	.16	0	0	0	.16	0	.0177778
SR				.0739	.0755	.0766	.0804	.0803	.0869	.091	.0994	.101	.101	0	.0844
TI				0	0	0	0	0	.011	0	0	0	.011	0	.0012222
V				0	0	0	0	0	0	0	0	0	0	0	0
ZN	<.005			.0039	.0022	.0019	.0019	.0022	.0042	.006	.007	0	.007	0	.0032556

WATER QUALITY VALUES FOR MORRILL
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	APR13/81 MORRILL RIVER	APR24/81 MORRILL RIVER	MAY11/81 MORRILL RIVER	MAY28/81 MORRILL RIVER	JUN22/81 MORRILL RIVER	SEP09/81 MORRILL RIVER	OCT12/81 MORRILL RIVER
ALK.TOT	20-300		81.1	60	68	42	31.5	53.4	61.8
AMMON.	<.002	>.08	.013	.016	.036	.0055	0	.005	0
CO2	2-5	>20							
CHLOR.	<170	>400	1.39	2.67	1.99	.67	0	0	0
COLOR	<15								
COND.FLD	150-2000								
COND.LAB	**		205	139	117	95	80.5	145	164
DO-PPM	>6-8	<4	12		12		11	9	14
DO-%SAT	100%								
DGAS.TOT	<103%	>110%							
DGAS.HIT	100%								
HARDNESS	20-400							67.3	79.9
H2S	<.002	>.004							
NITRITE	<.012	.2	0	0	.0095	0	0	0	0
NITRATE	<.12		.0566	.179	.111	.06	.039	0	.0206
PH-FLD	6.8-8.5	<5,>9	8		8		7.5	6	8
PH-LAB	**	**	8.1	8.3	8	8	8	8	8.1
PHOSPH.	<.05		.0081	.62	.125	.0628	.0192	0	0
RESID.TOT	<2000								
RESID.FIL	70-400		125	85	75	55	53	87	100
RESID.N.F	<3		137	942	268	122	52	0	0
SALIN.									
SILICA	<10-60		2.64	2.48	2.13	1.42	1.37	1.7	1.9
SULFATE	<90		17.4	8.15	7.75	6.7	8.8	19.5	18.8
TASTE	OK								
T.D.SOL	500-1000	>5000							
TEMP.	4-18C	<2,>25	.5		4		8	11	3.5
TURBID	1-40	>1000	38	135	110	25	8	2.1	1.5
METALS--									
AL	<.1	>5	.665	3.16	2.72	.784	.268	.111	0
AS	<.5	>1	0	0	0	0	0	0	0
BA	<1		.0211	.0366	.353	.0162	.0068	.0068	.0075
CA	4-150	>300	28.63	25	18.3	14	11.7	19.4	22.1
CD	<.0004		0	0	0	0	0	0	0
CO			0	.0158	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0
CU	<.006		.0033	.0067	.0046	.0021	.0014	0	0
FE	<.3		1.59	5.74	3.78	.574	.316	.115	.0962
HG	<.00005	>.0002	0	0	0	0	0	0	0
K		>50	.421	.648	.617	.23	.162	.14	.212
MG	<10	>100	6.44	2.33	3.48	2.23	2.51	4.59	5.04
MN	<.05	>15	.144	.24	.122	.0351	.0229	.0109	.0123
MO			0	0	0	0	0	0	0
NA		>500	2.02	.97	.97	.61	.59	1.2	1.48
NI			0	0	0	0	0	0	0
P			0	0	0	0	0	0	0
PB	<.01		.0011	.0037	.0025	.0012	0	0	0
SB			0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0
SI	<10-60		3.07	5.74	3.78	.574	.316	1.74	1.97
SN			0	0	0	0	0	0	0
SR			.171	.111	.0974	.0755	.0652	.118	.136
TI			.0169	.0585	.0991	.0601	.0149	.0086	.0089
V			0	0	0	0	0	0	0
ZN	<.005		.0049	.138	.0012	0	.0021	0	0

WATER QUALITY VALUES FOR NECHAKO
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	SEP24/79 @ GREER CREEK	SEP24/79 @ GREER CREEK	OCT07/79 @ GREER CREEK
ALK.TOT	20-300		28	27.3	27.9
AMMON.	<.002	>.08	0	0	.005
CO2	2-5	>20			
CHLOR.	<170	>600	0	0	0
COLOR	<15				
COND.FLD	150-2000				
COND.LAB	**		61.5	61.5	62.1
DO-PPM	>6-8	<4			
DO-SAT	100%				
DGAS.TOT	<103%	>110%			
DGAS.BIT	100%				
HARDNESS	20-600		31.6	31.2	30.7
H2S	<.002	>.004			
NITRITE	<.012	.2	0	0	0
NITRATE	<.12		0	0	.02
PH-FLD	6.8-8.5	<5,>9	7.4	7.5	7.6
PH-LAB	**	**			
PHOSPH.	<.05		.005	.005	.0055
RESID.TOT	<2000		52	53	
RESID.FIL	70-400		52	51	45
RESID.S.P	<3		0	0	0
SALIN.					
SILICA	<10-60		1.68	1.78	1.7
SULFATE	<90		3.2	3.12	3.28
TASTE	OK				
T.D.SOL	500-1000	>5000			
TEMP.	6-18C	<2,>25			
TURBID	1-40	>1000	0	0	0
METALS---					
AL	<.1	>5	0	0	0
AS	<.5	>1	0	0	0
BA	<1		.006	.0064	.0053
CA	6-150	>300	9.75	9.64	9.49
CD	<.0004		0	0	0
CO			0	0	0
CR	<.01		0	0	0
CU	<.006		0	0	0
FE	<.3		.032	.033	.014
HG	<.00005	>.0002	0	0	0
K		>50	.428	.431	.447
MG	<10	>100	1.75	1.72	1.69
MN	<.05	>15	.0068	.0073	.0058
MO			0	0	0
NA		>500	1.67	1.61	1.58
NI			0	0	0
P			0	0	0
PB	<.01		0	0	0
SB			0	0	0
SE		>2.5	0	0	0
SI	<10-60		1.7	1.67	1.65
SN			0	0	0
SR			.0386	.0378	.0368
TI			0	0	0
V			0	0	0
ZN	<.005		0	.0019	0

WATER QUALITY VALUES FOR MECHAKO
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	DEC 16/78 WELL #1 1 HR	MAR26/79 WELL #6 4 HRS	SEP12/83 WELL #6 8 HRS	MAR19/79 WELL #7 6 HRS	MAR20/79 WELL #7 24 HRS	MAR21/79 WELL #7 48 HRS	MAR22/79 WELL #7 72 HRS	MAR23/79 WELL #7 92 HRS	SEP12/83 WELL #7 8 HRS	MAR25/79 WELL #8 20 HRS	SEP11/83 WELL #8 8 HRS
ALK.TOT	20-300		156	174	134	110	113	114	112	112	144	136	142
AMMON.	<.002	>.08		.0138	.084	.061	.0603	.065	.073	.0725	.015	.0938	.09
CO2	3-5	>20											
CHLOR.	<170	>600	0	1	0	0	.83	0	0	0	0	.5	0
COLOR	<15		15	CLEAR		CLEAR	CLEAR	CLEAR	CLEAR	CLEAR		CLEAR	
COND.FLD	150-2000				196						192		199
COND.LAB	**		265	364	99.6	242	247	251	251	253	106.4	284	107.9
DO-PPM	>6-8	<4		0	.2	0	0	0	0	0	.15	0	.2
DO-SAT	100%			0	1.8	0	0	0	0	0	1.3	0	1.8
DGAS.TOT	<103%	>110%		92	96.9	107	106	109	105	107	98.6	99	96.5
DGAS.NIT	100%			116	122.1	136	134	139	133	136	124.3	125	109.5
HARDNESS	20-400		87.7	151.7	123	94.1	96.3	97.3	96.5	91.9	134.9	111.6	140
H2S	<.002	>.004			0						0		0
NITRITE	<.012	.2		0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.002	0	0	0	0	0	0	0	0	0	0
PH-FLD	6.8-8.5	<5,>9		8	6.7	8	8	8	8	8	6.7	8	6.8
PH-LAB	**	**	7.6		7.7						7.6		7.8
PHOSPH.	<.05		.17	.0155	.083	.072	.0705	.0716	.0675	.0667	.015	.0615	.043
RBEIO.TOT	<2000					173	170	171	170	171		188	
RBEIO.FIL	70-690		225	230	198	169	166	167	169	170	192	188	198
RBEIO.N.F	<1		39.2	0	0	0	0	0	0	0	0	0	0
SALIN.													
SILICA	<10-60												
SULFATE	<90		4.9	17.4	20.5	13.4	15.3	15.5	15.7	15.8	18	12.3	19
TASTE	OK			OK		OK	OK	OK	OK	OK		OK	
T.D.SOL	500-1000	15000											
TEMP.	6-18C	<2,>25	8.5	7	7.5	9.5	9.5	9.2	9.2	8.5	8.3	7.5	7
TURBID	1-60	>1000	15		0						.7		.3
METALS—													
AL	<.1	>5		0	0	0	0	0	0	0	0	0	0
AS	<.5	>1		0	0	0	0	0	0	0	0	0	0
BA	<1			.649	.132	.103	.105	.106	.105	.105	.052	.1	.084
CA	4-150	>300	21	43.1	33.1	25.5	26.3	26.6	26.1	25.4	37.3	32.2	39.2
CD	<.0004		0	0	.0008	0	0	0	0	0	.0006	0	.0011
CO				0	0	0	0	0	0	0	0	0	0
CR	<.01			0	0	0	0	0	.018	0	0	0	0
CU	<.006		.002	0	0	0	0	0	0	0	0	0	0
FE	<.3		.89	.113	.125	.049	.046	.028	.021	.024	.199	.059	.15
HG	<.00005	>.0002		0	0	.00245	0	0	0	0	0	0	0
K		>50	5.79	3.61	5.04	4.23	4.23	4.22	4.26	4.46	3.37	4.17	4.52
MG	<10	>100	7.37	10.6	9.5	7.38	7.44	7.5	7.49	6.91	9.9	7.57	10
MN	<.05	>15	.16	.15	.24	.189	.192	.193	.192	.18	.145	.335	.466
MO				.15	0	0	0	0	0	0	.008	0	0
NA		>500	20.2	15.7	13.6	10.7	11.2	11.7	10.6	12.5	13	13.4	10.2
NI				0	0	0	0	0	0	0	0	0	0
P				0	.1	0	0	0	0	0	0	0	.1
PB	<.01		.001	0	0	0	0	0	0	0	0	0	0
SB				0	0	0	0	0	0	0	0	0	0
SE		>2.5		0	0	0	0	0	0	0	0	0	0
SI	<10-60			11.3	13.9	11.3	11.2	13.1	12.9	12.9	10.9	12.7	13
SN					0					0	0		.01
SR				.183	.231	.179	.185	.19	.188	.186	.148	.191	.213
TI				0	0	0	0	0	0	0	0	0	0
V				0	0	0	0	0	0	0	0	0	0
ZN	<.005		.017	0	0	0	0	0	0	0	0	0	.005

WATER QUALITY VALUES FOR NICOLA
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	AUG04/82 NICOLA @ SPENCES	AUG04/82 SIDE CHANNEL	FEB08/83 SIDE CHANNEL	MAR07/83 UPSTREAM OF SPIUS
ALK.TOT	20-300		96	86	92	106
AMMON.	<.002	>.08	.006	.022	.014	0
CO2	3-5	>20				
CHLOR.	<170	>400	1.5	1.3	1.6	2
COLOR	<15					5
COND.FLD	150-2000					145
COND.LAB	**		217	207	224	251
DO-PPM	>6-8	<4				
DO-SAT	100%					96.8
DGAS.TOT	<103%	>110%				103.2
DGAS.NIT	100%					104.9
HARDNESS	20-400			86.9	95.6	116
H2S	<.002	>.004				
NITRITE	<.012	.2	0	0	0	.008
NITRATE	<.12		0	.03	.2	0
PH-FLD	6.8-8.5	<5,>9				8.4
PH-LAB	**	**	8.6	8.5	8.1	8.3
PHOSPH.	<.05		.026	.035	.072	.045
RESID.TOT	<3000					
RESID.FIL	70-400		133	130	156	161
RESID.N.F	<3		8	0	0	7
SALIN.						0
SILICA	<10-60		2.4	1.2	2.4	4
SULFATE	<90		14.7	17	18.5	19.7
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25				6
TURBID	1-60	>1000	1.5	.6	.5	1.6
METALS--						
AL	<.1	>5		0	0	.07
AS	<.5	>1		0	0	0
BA	<1			.019	.02	.032
CA	4-150	>300		22.6	24.8	31.9
CD	<.0004			0	0	0
CO				0	0	0
CR	<.01			0	0	0
CU	<.006			0	0	.001
FE	<.3			.025	.023	.109
HG	<.00005	>.0002		0	0	0
K		>50		1.9	2.45	1.4
MG	<10	>100		7.3	8.1	8.7
MN	<.05	>15		.025	.016	.028
MO				0	0	0
NA		>500		6	6.9	0
NI				0	0	0
P				0	.11	.07
PB	<.01			.07	0	0
SB				0	0	0
SE		>2.5		0	0	0
SI	<10-60			1.5	2.6	4.2
SN				0	0	0
SR				.129	.149	.163
TI				0	0	0
V				0	0	0
ZN	<.005			0	0	.002

WATER QUALITY VALUES FOR NITINAT
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	MAR06/79 LITTLE NITINAT	MAR25/80 LITTLE NITINAT	APR26/80 LITTLE NITINAT	MAY26/80 LITTLE NITINAT	JUN23/80 LITTLE NITINAT	MAR06/79 NITINAT RIVER	MAR25/80 NITINAT RIVER	APR26/80 NITINAT RIVER	MAY26/80 NITINAT RIVER	JUN23/80 NITINAT RIVER
ALK.TOT	20-300		20.1	13.5	15.2	17	21.5	30.1	28.2	29.3	30.5	36
AMMON.	<.002	>.08	0	0	0	0	.005	0	0	.005	0	0
CO2	2-5	>20										
CHLOR.	<170	>400	1.6	1.53	1.68	1.71	2.73	1.1	1.54	1.36	1.59	1.97
COLOR	<15											
COND.FLD	150-2000											
COND.LAB	**		48	36.6	40.8	46	56.5	67.5	66.5	70.5	74	83.5
DO-PPM	>6-8	<4										
DO-%SAT	100%											
DGAS.TOT	<103%	>110%										
DGAS.NIT	100%											
HARDNESS	20-400			15.4	17.5	20.3	22.8		31	34.1	36.2	37.7
H2S	<.002	>.004										
NITRITE	<.012	.2	0	.0057	.0052	0	0	0	.0073	.0056	0	0
NITRATE	<.12		.0163	.0679	.0135	.0616	.0465	.014	.0535	.13	.177	.0258
PH-FLD	6.8-8.5	<5,>9										
PH-LAB	**	**	7.7	7.2	7.2	7.4	7.6	7.7	7.4	7.4	7.6	7.6
PHOSPH.	<.05		0	0	0	.0058	0	0	.0058	0	.0058	0
RESID.TOT	<2000											
RESID.FIL	70-400		34	26	40	32	36	41	46	58	49	49
RESID.N.F	<3		0	0	0	0	0	0	7	0	0	0
SALIN.												
SILICA	<10-60		1.57	1.43	1.52	1.36	1.92	1.3	1.72	1.72	1.36	1.92
SULFATE	<90		15	1.5	2.1	3.3	3.05	1.6	1.9	3.3	3	3.05
TASTE	OK											
T.D.SOL	500-1000	15000										
TEMP.	4-18C	<2,>25										
TURBID	1-60	>1000	0	0	0	0	0	0	0	0	0	0
METALS—												
AL	<.1	>5	0	0	0	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0
BA	<1		.0053	.0049	.0056	.006	.0083	.0056	.0075	.0082	.0075	.0102
CA	4-150	>300	7.56	5.48	6.29	7.38	8.24	9.68	11.1	12.3	13.2	13.6
CD	<.0004			0	0	0	0		0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0
CU	<.006			0	0	0	0		0	0	0	0
FE	<.3		0	.011	.014	0	.012	.035	.037	.025	.01	.015
HG	<.00005	>.0002		0	0	0	0		0	0	0	0
K		>50		.101	.172	.13	.138		.123	.158	.131	.13
MG	<10	>100	.466	.419	.436	.446	.55	.7	.806	.81	.782	.901
MN	<.05	>15	0	0	0	0	0	.0033	.0039	0	0	0
MO			0	0	0	0	0	0	0	0	0	0
NA		>500	.91	1.19	1.26	1.36	1.67	.57	1.18	1.15	1.28	1.4
NI			0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0
PB	<.01			0	0	0	0		0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0
SI	<10-60		1.58	1.47	1.46	1.55	1.78	1.37	1.8	1.66	1.58	1.86
SN			0	0	0	0	0	0	0	0	0	0
SR			.0157	.0111	.0114	.0135	.0174	.022	.023	.0225	.024	.0285
TI			0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0
ZN	<.005			0	.0017	.0012	.0021		0	.002	.0014	0

WATER QUALITY VALUES FOR MITINAT
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	DEC12/78 DH#1	JUN09/79 DH#3a	JUN10/79 DH#3b	JUN11/79 DH#3c	JUN12/79 DH#3d
ALK.TOT	20-300		25.3				39.1
AMMON.	<.002	>.08	0				0
CO2	2-5	>20					
CHLOR.	<170	>400	2.1				1.75
COLOR	<15						
COND.FLD	150-2000						
COND.LAB	**		63				86.5
DO-PPM	>6-8	<4					
DO-%SAT	100%						
DGAS.TOT	<103%	>110%					
DGAS.NIT	100%						
HARDNESS	20-400						
H2S	<.002	>.004					
NITRITE	<.012	.2	0				0
NITRATE	<.12		.067				.041
PH-FLD	6.8-8.5	<5,>9					
PH-LAB	**	**	6.7				7
PHOSPH.	<.05		0				.007
RESID.TOT	<2000						
RESID.FIL	70-400						59
RESID.N.F	<3		0				0
SALIN.							
SILICA	<10-60		5.3				5.02
SULFATE	<90		1.2				0
TASTE	OK						
T.D.SOL	500-1000	15000					
TEMP.	4-18C	<2,>25					
TURBID	1-60	>1000	0				0
METALS---							
AL	<.1	>5	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0
BA	<1		.0056	.0042	.004	.0037	.0041
CA	4-150	>300	9.68	13.1	12.8	12.6	13.1
CD	<.0004						
CO			0	0	0	0	0
CR	<.01		0	0	0	0	0
CU	<.006						
FE	<.3		0	.018	.011	.01	0
HG	<.00005	>.0002					
K		>50					
MG	<10	>100	1	1.09	1.08	1.08	1.06
MN	<.05	>15	0	0	0	0	0
MO			0	0	0	0	0
NA		>500	1.7	1.17	1.12	1.06	1.34
NI			0	0	0	0	0
P			0	0	0	0	0
PB	<.01						
SB			0	0	0	0	0
SE		>2.5	0	0	0	0	0
SI	<10-60		4.74	4.86	4.79	4.74	4.94
SN			0	0	0	0	0
SR			.0226	.0307	.0302	.03	.0314
TI			0	0	0	0	0
V			0	0	0	0	0
ZN	<.005						

WATER QUALITY VALUES FOR MITIMAT
(BELOW DETECTION LEVEL=0)

			MAY19/79	MAY21/79	JUN08/79	JUN09/79	JUN10/79	JUN11/79	JUN12/79	JUN03/79	JUN04/79	
PARAM.	RECOMM.	TOXIC	DN84a	DN84b	DN84c	DN84d	DN84e	DN84f	DN84g	DN85a	DN85b	DN85c
ALK.TOT	20-300			27.7	30.9				27.4	24.3		
AMMON.	<.002	>.08		0	0				0	0		
CO2	2-5	>20										
CHLOR.	<170	>600		1.74	1.8				1.64	1.8		
COLOR	<15											
COND.FLD	150-2000											
COND.LAB	"			63.4	72.5				64.5	57.5		
DO-PPM	>6-8	<4		9.5								
DO-SAT	100%											
DGAS.TOT	<103%	>110%		101								
DGAS.HIT	100%			108								
HARDNESS	20-400			26.6								
H2S	<.002	>.004										
NITRITE	<.012	.2		0	0				0	0		
NITRATE	<.12			.043	.041				.041	.057		
PH-FLD	6.8-8.5	<5,>9										
PH-LAB	"	"		7	7				6.8	6.7		
PHOSPH.	<.05			.0095	.005				.006	0		
PHEN.TOT	<2000											
PHEN.FIL	70-600			51	52				47	44		
PHEN.H.F	<1			0	0				0	0		
SALIN.												
SILICA	<10-60			4.85	4.85				4.55	4.48		
SULFATE	<80			1.22	1				0	1.6		
TASTE	OK											
T.D.SOL	500-1000	15000										
TEMP.	4-18C	<2,>25										
TURBID	1-60	>1000		0	0				0	0		
METALS—												
AL	<.1	>5	0	0	0	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0
BA	<1		.0054	.0048	.005	.0051	.0041	.0051	.0052	.0039	.0045	.0042
CA	4-150	>300	9.51	9.34	9.86	9.37	8.95	8.71	9.09	8.53	8.47	8.23
CD	<.0004											
CO			0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0
CU	<.006											
FE	<.3		0	0	.055	0	0	0	0	0	0	0
HG	<.00005	>.0002										
K		>50										
MG	<10	>100	.82	.8	.99	.881	.862	.855	.847	.774	.769	.777
MN	<.05	>15	0	0	0	0	0	0	0	0	0	0
MO			0	0	0	0	0	0	0	0	0	0
NA		>500	1.57	1.72	.87	1.09	.99	.92	1.18	1.06	1.33	1.09
NI			0	0	0	0	0	0	0	0	0	0
P					0	0	0	0	0	0	0	0
PB	<.01											
SB			0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0
SI	<10-60				4.36	4.49	4.35	4.27	4.54	4.23	4.36	4.14
SN					0	0	0	0	0	0	0	0
SR			.0242	.0241	.024	.0232	.0223	.022	.0228	.0209	.0208	.0208
TI			0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0
ZN	<.005											

WATER QUALITY VALUES FOR NORTH THOMPSON RIVER
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUL29/81 AT BOULDER	AUG25/81 AT BOULDER	SEP30/81 AT BOULDER	OCT13/81 AT BOULDER	MAY04/82 AT BARRIERE	JUN02/82 AT BARRIERE	JUL06/82 AT BARRIERE	JUL29/82 AT BARRIERE
ALK.TOT	20-300		26.2	25.8	32.2	31.4	37	26	26.5	29.5
AMMON.	<.002	>.08	0	.0051	.0081	0	0	.007	0	0
CO2	2-5	>20								
CHLOR.	<170	>400	0	.7	0	.65	.9	0	0	0
COLOR	<15						20			
COND.FLD	150-2000									
COND.LAB	**		48.3	60	80	79.5	94.3	69.4	62.4	73
DO-PPM	>6-8	<4								
DO-%SAT	100%									
DGAS.TOT	<103%	>110%								
DGAS.HIT	100%									
HARDNESS	20-400		27.6	32.2	35.7	34.1	44.7	33	33	37.4
H2S	<.002	>.004								
NITRITE	<.012	.2	0	0	0	0	.007	.007	.005	.008
NITRATE	<.12		.071	.073	.099	.083	.12	.11	.08	.08
PH-FLD	6.8-8.5	<5,>9								
PH-LAB	**	**	7.6	7.7	7.8	7.7	7.7	7.3	7.6	7.2
PHOSPH.	<.05		.021	.0172	.0051	0	.009	.017	.036	.005
RESID.TOT	<2000									
RESID.FIL	70-400		42	40	55	55	75	53	54	50
RESID.N.F	<3		17	24	0	6	0	13	35	19
SALIN.										
SILICA	<10-60		1.67	1.45	2.17	2.14	3.9	2.6	2	2
SULFATE	<90		5	5.8	6.1	7.15	10.9	5.2	6.1	5.6
TASTE	OK									
T.D.SOL	500-1000	15000								
TEMP.	4-18C	<2,>25								
TURBID	1-60	>1000	6.5	10	1.6	1.6	1.9	3.1	20	5
METALS--										
AL	<.1	>5	.586	1.13	.155	.11	.17	.21	.59	.34
AS	<.5	>1	0	0	0	0	0	0	0	0
BA	<1		.012	.0173	.0066	.006	.01	.008	.013	.01
CA	4-150	>300	8.9	9.88	11.6	11	13.2	9.8	9	10.6
CD	<.0004		0	0	0	0	0	0	0	.002
CO			0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0
CU	<.006		0	.0035	0	0	0	.001	.003	0
FE	<.3		.853	1.65	.225	.13	.248	.233	.815	.997
HG	<.00005	>.0002	0	.108	0	0	0	0	0	0
K		>50	.796	1.16	.757	.685	.89	.71	.88	.85
MG	<10	>100	1.3	1.04	1.63	1.61	2.5	1.7	1.4	1.7
MN	<.05	>15	.012	.0181	.0055	.0035	.008	.01	.027	.042
MO			0	0	0	0	0	0	0	0
NA		>500	.61	.7	1.07	1.12	1.8	1.2	.7	1.1
NI			0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0
SI	<10-60		2.52	3.12	2.21	2.33	3.8	2.8	2.7	2.6
SN			0	0	0	0	0	0	0	0
SR			.0529	.0617	.0741	.0707	.075	.056	.051	.062
TI			.0718	.139	.013	.0045	.008	.009	.042	.03
V			0	0	0	0	0	0	0	0
ZN	<.005		.003	.0049	.0017	0	0	0	.004	.007

WATER QUALITY VALUES FOR PERRY RIVER
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUL25/82 PERRY RIVER	AUG22/82 PERRY RIVER	SEP12/82 PERRY RIVER	OCT15/82 PERRY RIVER
ALK.TOT	20-300		11	14	14	13.5
AMMON.	<.002	>.08	0	0	0	0
CO2	2-5	>20				
CHLOR.	<170	>400	0	0	.6	0
COLOR	<15					
COND.FLD	150-2000					
COND.LAB	**		27.2	31.7	33	32.9
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.NIT	100%					
HARDNESS	20-400		11.6	13.7	15	14.9
H2S	<.002	>.004				
NITRITE	<.012	.2	.006	0	0	0
NITRATE	<.12		.12	.1	.11	.13
PH-FLD	6.8-8.5	<5,>9				
PH-LAB	**	**		7.7	7.1	7.5
PHOSPH.	<.05		0	.005	0	0
RESID.TOT	<2000					
RESID.FIL	70-400		24	24	30	27
RESID.N.F	<3		0	0	0	9
SALIN.						
SILICA	<10-60		1.5	2	2.2	1.7
SULFATE	<90		4.6	3.5	4	4.1
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	6-18C	<2,>25				
TURBID	1-40	>1000	.7	1	.3	.8
METALS--						
AL	<.1	>5	.1	.12	.1	.1
AS	<.5	>1	0	0	0	0
BA	<1		.008	.009	.009	.009
CA	4-150	>300	3.5	4	4.6	4.6
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	0	0
CU	<.006		0	0	0	0
FE	<.3		.126	.167	.149	.159
HG	<.00005	>.0002	0	0	0	0
K		>50		.72	.74	.77
MG	<10	>100	.5	.6	.7	.6
MN	<.05	>15	.002	.005	.006	.004
MO			0	0	0	0
NA		>500	.5	0	.7	.6
NI			0	0	0	0
P			0	0	0	0
PB	<.01		0	0	0	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		1.8	1.8	2	2
SN			0	0	0	0
SR			.03	.036	.035	.037
TI			.009	.01	.009	.011
V			0	0	0	0
ZN	<.005		0	0	0	0

WATER QUALITY VALUES FOR QUESNEL
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	AUG19/79 @ RIVER	AUG19/79 @ RIVER	OCT02/79 @ RIVER	OCT02/79 @ RIVER	OCT15/79 @ RIVER	DEC04/79 @ RIVER HATCHERY	APR01/80 @ RIVER HATCHERY	APR16/80 HATCHERY	APR16/80 HATCHERY SPRING @	MAY04/80 RIVER @ BRIDGE	MAY28/80 RIVER @ BRIDGE
ALK.TOT	20-300		44.1	44.1	46.1	45.8	45.3	45.9	49.9	50.2	61.3	47.5	47.5
AMMON.	<.002	>.08	0	0	0	0	0	0	0	0	.0193	0	0
CO2	2-5	>20											
CHLOR.	<170	>400	0	0	0	0	0	0	0	.19	.75	0	2.97
COLOR	<15							0					
COND.FLD	150-2000												
COND.LAB	"		102	101	103	104	105	108	114	114	138	110	110
DO-PPM	>6-8	<4						11					
DO-%SAT	100%							87					
DGAS.TOT	<103%	>110%						98.1					
DGAS.NIT	100%							99.5					
HARDNESS	20-400		48.9	48.9	56.1	56	52.3	51.9	59		66	55.1	54
H2S	<.002	>.004											
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.0865	.086	.0575	.071	.0841	.111	.121	.118	.211	.116	.122
PH-FLD	6.8-8.5	<5,>9	7.8	7.8	8	7.9	7.8						
PH-LAB	"	"						7.7	7.8	7.9	7.8	7.7	7.7
PHOSPH.	<.05		0	0	0	0	0	0	0	0	0	0	0
RESID.TOT	<2000		83	88	69	70	69	64					
RESID.FIL	70-400		82	82	69	70	67	64	76	76	88	69	72
RESID.N.F	<3		0	0	0	0	0	0	0	0	0	0	0
SALIN.													
SILICA	<10-60		1.49	1.53	1.3	1.3	1.25	1.57	1.67	1.81	2.02	1.65	1
SULFATE	<90		5.94	6.05	6.12	6.33	5.8	6.45	7.05	8.5	7.2	6.05	4.4
TASTE	OK												
T.D.SOL	500-1000	15000											
TEMP.	6-18C	<2,>25						4.3		4.5	6	5	3.5
TURBID	1-60	>1000	0	0	0	0	0	0	0	0	0	0	0
METALS--													
AL	<.1	>5	0	0	0	0	0	0	0		0	0	0
AS	<.5	>1	0	0	0	0	0	0	0		0	0	0
BA	<1		.0045	.0043	.0048	.0049	.0052	.0048	.0054		.0045	.0058	.0048
CA	4-150	>300	16.3	16.3	19.2	19.2	17.6	17.4	20		24	18.7	17.6
CD	<.0004		0	0	0	0	.001	0	0		0	0	0
CO			0	0	0	0	0	0	0		0	0	0
CR	<.01		0	0	0	0	0	0	0		0	0	0
CU	<.006		0	0	0	0	.0012	0	0		0	0	0
FE	<.3		0	0	0	0	0	0	0		0	.013	0
HG	<.00005	>.0002	0	0	0	0	0	0	0		0	0	0
K		>50	.429	.441	.436	.436	.485	.437	.433		.4	.456	.52
MG	<10	>100	2	2	1.97	1.96	20.3	2.06	2.21		1.48	2.04	2.44
MN	<.05	>15	0	0	0	0	0	0	0		0	0	0
MO			0	0	0	0	0	0	0		0	0	0
NA		>500	.79	.8	.8	.81	.84	.921	.862		1.01	.79	.936
NI			0	0	0	0	0	0	0		0	0	0
P			0	0	0	0	0	0	0		0	0	0
PB	<.01		0	0	0	0	0	0	0		0	0	0
SB			0	0	0	0	0	0	0		0	0	0
SE		>2.5	0	0	0	0	0	0	0		0	0	0
SI	<10-60		1.52	1.5	1.34	1.35	1.26	1.03	1.69		1.88	1.6	1.67
SN			0	0	0	0	0	0	0		.0	0	0
SR			.117	.117	.12	.12	.126	.125	.137		.131	.128	.132
TI			0	0	0	0	0	0	0		0	0	0
V			0	0	0	0	0	0	0		0	0	0
ZN	<.005		0	.003	.0026	.0019	.0017	.006	0		0	0	0

WATER QUALITY VALUES FOR QUESNEL
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	JUN24/80 @ RIVER	AUG06/80 @ RIVER	SEP18/80 @ RIVER	OCT15/80 @ RIVER
ALK.TOT	20-300		43	46	47	45.5
AMMON.	<.002	>.08	.0086			0
CO2	2-5	>20				
CHLOR.	<170	>400	.27	1.43	0	0
COLOR	<15					
COND.FLD	150-2000					
COND.LAB	"		98	109	107	108
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.HIT	100%					
HARDNESS	20-400		47.5	48.1	49.4	53.3
H2S	<.002	>.004				
NITRITE	<.012	.2	0	0	0	0
NITRATE	<.12		.0751	.0653	.0559	.11
PH-FLD	6.8-8.5	<5,>9				
PH-LAB	"	"	7.9	8	7.9	7.6
PHOSPH.	<.05		.0076	0	0	.0073
RESID.TOT	<2000					
RESID.FIL	70-400		64	67	66	71
RESID.M.F	<3		0	0	0	0
SALIN.						
SILICA	<10-60		1.26	1.45	1.64	1.67
SULFATE	<90		7.55	6.9	6.55	6.4
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25	13.5			
TURBID	1-60	>1000	1.4	0	1.3	1.1
METALS—						
AL	<.1	>5	0	0	0	0
AS	<.5	>1	0	0	0	0
BA	<1		.0054	.01	.005	.0128
CA	4-150	>200	16	15.2	16.6	18.2
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	0	0
CU	<.006		0	0	0	0
FE	<.3		.021	.14	0	0
HG	<.00005	>.0002	0	0	0	0
K		>50	.436	.662	.418	.438
MG	<10	>100	1.83	2.46	1.93	1.9
MN	<.05	>15	0	.0104	0	0
MO			0	0	0	0
NA		>500	.975	1.12	0.48	.304
NI			0	0	0	0
P			0	0	0	0
PB	<.01		0	0	0	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		1.65	2.75	1.67	1.61
SN			0	0	0	0
SR			.119	.072	.131	.129
TI			0	0	0	0
V			0	0	0	0
ZN	<.005		0	.0011	0	0

WATER QUALITY VALUES FOR QUESNEL
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	DEC02/79 1 HR WELL Q-2	DEC03/79 24 HRS WELL Q-2	DEC04/79 48.5 HR WELL Q-2	DEC05/79 72 HR WELL Q-2	DEC06/79 93 HR WELL Q-2	APR02/80 2 HR P.W. #1	APR04/80 96 HR P.W. #1	APR11/80 1380 P.W. #2
ALK.TOT	20-300		67.1	72	69.3	69.6	69.2	66	67.4	66.9
AMMON.	<.002	>.08	0	0	0	0	0	0	0	0
CO2	2-5	>20								
CHLOR.	<170	>400	0	.5	.5	.5	.5	.63	.79	.68
COLOR	<15		0	0	0	0	0			
COND.FLD	150-2000									
COND.LAB	**		152	146	157	155	156	143	155	153
DO-PPM	>6-8	<4	4.8	4.6	4.8	4.8	5			
DO-SAT	100%		48	46	49	48	50			
DGAS.TOT	<103%	>110%	93	92	92	91	91			
DGAS.NIT	100%		105	104	104	103	103			
HARDNESS	20-400		72.8	76.2	73	74.4	74.4	78.2	79.1	76
H2S	<.002	>.004								
NITRITE	<.012	.2	0	0	0	0	0	0	.0080	0
NITRATE	<.12		.2	.207	.194	.186	.189	.158	.133	.167
PH-FLD	6.8-8.5	<5,>9								
PH-LAB	**	**	7.5	7.5	7.5	7.7	7.4	7.8	7.8	8
PHOSPH.	<.05		0	0	0	0	0	0	0	0
RESID.TOT	<2000		93		89	98	94			
RESID.FIL	70-400		93	94	87	98	94	96	97	91
RESID.S.F	<3		0	0	0	0	0	0	0	0
SALIN.				0						
SILICA	<10-60		2.72	2.5	2.5	2.55	2.5	2.15	2.12	2.2
SULPHTE	<50		6.85	6.9	6.95	7.05	6.85	9.3	9.75	7.1
TASTE	OK									
T.D.SOL	500-1000	15000								
TEMP.	4-18C	<2,>25	7.5	7.5	7.5	7.5	7.5			8
TURBID	1-60	>1000	0	0	0	0	0	0	0	0
METALS--										
AL	<.1	>5	0	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0
BA	<1		.005	.0046	.0051	.0052	.005	.0047	.0048	.0045
CA	4-150	>300	24.3	25.6	24.3	24.8	24.8	26.5	26.8	26
CD	<.0004		0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	.066	0
CU	<.006		0	0	0	0	0	0	0	0
FE	<.1		.011	0	0	0	0	0	0	0
HG	<.00005	>.0002	0	0	0	0	0	0	0	0
K		>50	.558	.565	.578	.559	.566	.433	.463	.45
MG	<10	>100	2.94	2.97	3	3.03	3.03	2.92	2.96	2.68
MN	<.05	>15	0	0	0	0	0	0	0	0
MO			0	0	0	0	0	0	0	0
NA		>500	1.41	1.35	1.72	1.39	1.43	1.05	1.01	1.12
NI			0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0
SI	<10-60		1.92	1.88	1.88	1.95	1.97	2.18	2.14	2.05
SN			0	0	0	0	0	0	0	0
SR			.154	.157	.159	.161	.164	.143	.145	.138
TI			0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0
ZN	<.005		.0075	.0040	.0078	.006	.0114	0	0	0

WATER QUALITY VALUES FOR RAFT
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	AUG21/79 RAFT RIVER	NOV29/79 RAFT RIVER	APR17/80 RAFT RIVER	JUL22/80 RAFT RIVER	JUL29/81 RAFT RIVER	AUG25/81 RAFT RIVER	SEP30/81 RAFT RIVER	OCT13/81 RAFT RIVER	MAY04/82 RAFT RIVER	JUN02/82 RAFT RIVER
ALK.TOT	20-300		37.2	44	20.8	13	21.3	32.6	22.4	20.1	21	9
AMMON.	<.002	>.08	0	0	0	0	0	.0063	.0107	0	0	.008
CO2	2-5	>20										
CHLOR.	<170	>600	0	.5	.75	0	0	.65	.51	.56	.8	0
COLOR	<15		7	5	14							
COND.FLD	150-2000											
COND.LAB	**		91.3	113	56	29.8	48.3	78.5	56	50	61.5	26
DO-PPM	>6-8	<4										
DO-SAT	100%											
DGAS.TOT	<103%	>110%										
DGAS.NIT	100%											
HARDNESS	20-400		37.3	46.4	27.2	13	19.1	31.7	22.4	20.4	27.2	15.2
H2S	<.002	>.004										
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	.008	.008
NITRATE	<.12		.0222	.0925	.141	.0163	.016	.024	.027	.044	.23	.04
PH-FLD	6.8-8.5	<5,>9									6.1	
PH-LAB	**	**	7.8	7.6	7.3	7.1	7.6	7.9	7.6	7.5	7.5	7.4
PHOSPH.	<.05		.005	0	.0153	0	0	0	.0071	0	.013	.026
RESID.TOT	<2000											
RESID.FIL	70-400		71	80	47	31	45	59	47	40	59	34
RESID.N.F	<3		0	0	10	0	0	0	0	0	0	31
SALIN.												
SILICA	<10-60		4.2	5.25	4.01	2.89	3.33	42.9	3.55	3.31	4.6	2.8
SULFATE	<90		7.65	10.6	5.9	2	3.5	5.8	3.5	5.1	5.7	3.5
TASTE	OK											
T.D.SOL	500-1000	15000										
TEMP.	4-18C	<2,>25				13.6					3.5	
TURBID	1-60	>1000	0	0	3.6	1.2	0	0	1.5	0	2.6	10.7
METALS--												
AL	<.1	>5	0	0	.23	0	0	.057	.138	.097	.18	.53
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0
BA	<1		.0161	.0151	.0131	.0049	.01	.0138	.0094	.0084	.011	.01
CA	4-150	>300	11.2	13.5	8.57	4.61	6.15	9.79	7.08	6.32	8	3.6
CD	<.0004		0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	.0196	0	0	0
CU	<.006		0	0	0	0	0	0	0	0	0	.001
FE	<.3		.109	.17	.405	.053	.124	.174	.227	.112	.19	.368
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0
K		>50	.954	.925	.722	.328	.541	.784	.607	.533	.81	.53
MG	<10	>100	2.27	3.07	1.4	.35	.92	1.76	1.15	1.12	1.4	.6
MN	<.05	>15	.0042	.0135	.0357	0	.0121	.0088	.0226	.0128	.013	.027
MO			0	0	0	0	0	0	0	0	0	0
NA		>500	3.25	3.59	1.61	.942	1.26	2.4	1.64	1.46	1.6	.7
NI			0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0
SI	<10-60		4.43	4.24	4.09	2.89	3.2	4.32	3.43	3.54	4.4	3.2
SN			0	0	0	0	0	0	0	0	0	0
SR			.0963	.112	.0526	.0399	.0509	.0775	.0518	.049	.057	.025
TI			0	0	.0093	0	0	0	0	.0089	.005	.013
V			0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	.0095	.0035	0	.0015	.0006	.0041	0	0	0

WATER QUALITY VALUES FOR RAFT
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUL06/82 RAFT RIVER	JUL20/82 RAFT RIVER
ALK.TOT	20-300		11.5	19.5
AMMON.	<.002	>.08	0	0
CO2	2-5	>20		
CHLOR.	<170	>600	0	.5
COLOR	<15			
COND.FLD	150-2000			
COND.LAB	**		27.4	47.2
DO-PPM	>6-8	<4		
DO-SAT	100%			
DGAS.TOT	<103%	>110%		
DGAS.PIT	100%			
HARDNESS	20-400		12.8	26.2
H2S	<.002	>.004		
NITRITE	<.012	.2	0	0
NITRATE	<.12		.02	.006
PH-FLD	6.8-8.5	<5,>9		
PH-LAB	**	**	7.7	7.4
PHOSPH.	<.05		.015	0
RESID.TOT	<2000			
RESID.FIL	70-400		31	44
RESID.N.F	<3		10	6
SALIN.				
SILICA	<10-60		2.6	3.3
SULFATE	<90		4.7	4
TASTE	OK			
T.D.SOL	500-1000	15000		
TEMP.	4-18C	<2,>25		
TURBID	1-60	>1000	2.8	.8
METALS--				
AL	<.1	>5	.21	.11
AS	<.5	>1	0	0
BA	<1		.007	.01
CA	4-150	>300	3.6	6
CD	<.0004		0	0
CO			0	0
CR	<.01		.006	0
CU	<.006		0	0
FE	<.3		.173	.133
HG	<.00005	>.0002	0	0
K		>50	.4	.57
MG	<10	>100	.5	1
MN	<.05	>15	.012	.013
MO			0	0
NA		>500	.7	1.3
NI			0	0
P			0	0
PB	<.01		0	0
SB			0	0
SE		>2.5	0	0
SI	<10-60		2.6	3.5
SN			0	0
SR			.026	.046
TI			.004	.002
V			0	0
ZN	<.005		.001	0

WATER QUALITY VALUES FOR RANKIN
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	MAY07/80 @ HEAD-POND	JUL23/80 @ HEAD-POND	JUL23/80 AT PENNY	AUG19/80 AT PENNY
ALK.TOT	20-300		153	169	157	
AMMON.	<.002	>.08	0	0	0	
CO2	2-5	>20				
CHLOR.	<170	>600	0	0	0	
COLOR	<15		10	30	30	
COND.FLD	150-2000					
COND.LAB	**		293	300	301	
DO-PPM	>6-8	<4			10	7
DO-SAT	100%				95	68
DGAS.TOT	<103%	>110%			100	100
DGAS.PIT	100%				101	108
HARDNESS	20-400		159	170	171	
H2S	<.002	>.004				
NITRITE	<.012	.2	0	0	0	
NITRATE	<.12		.015	0	.011	
PH-FLD	6.8-8.5	<5,>9	8	9.5	9.5	8
PH-LAB	**	**	8.1	8.1	8	
PHOSPH.	<.05		.006	.018	.013	
RESID.TOT	<2000					
RESID.FIL	70-400		170	185	250	
RESID.N.F	<3		0	0	0	
SALIN.						
SILICA	<10-60		2	2.5	2.5	
SULFATE	<90		7	7	8	
TASTE	OK		OK	OK	OK	
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25	6	9.5	10	10.7
TURBID	1-60	>1000	0	2.3	1.5	
METALS--						
AL	<.1	>5	0	.16	.14	
AS	<.5	>1	0	0	0	
BA	<1		.1	.1	.1	
CA	4-150	>300	39	42	42	
CD	<.0004		0	0	0	
CO			0	0	0	
CR	<.01		0	0	0	
CU	<.006		0	0	0	
FE	<.3		.036	.152	.113	
HG	<.00005	>.0002	0	0	0	
K		>50	.3	.2	.2	
MG	<10	>100	15	16	16	
MN	<.05	>15	.004	.01	.005	
MO			0	0	0	
NA		>500	.4	.5	.4	
NI			0	0	0	
P			0	0	0	
PB	<.01		0	0	0	
SB			0	0	0	
SE		>2.5	0	0	0	
SI	<10-60		2	3	3	
SN			0	0	0	
SR			.0982	.111	.112	
TI			0	0	0	
V			0	0	0	
ZN	<.005		.0022	0	.0019	

WATER QUALITY VALUES FOR SALMON
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	AUG22/79 SALMON RIVER	APR21/81 SALMON RIVER	MAY27/81 SALMON RIVER	JUN30/81 SALMON RIVER	JUL21/81 SALMON RIVER	AUG25/81 SALMON RIVER	SEP24/81 SALMON RIVER	OCT20/81 SALMON RIVER
ALK.TOT	20-300		178	88.2	63.5	111	110	170	167	145
AMMON.	<.002	>.08	.016	.0074	.0156	.0069	.0054	.0051	.0091	.0067
CO2	2-5	>20								
CHLOR.	<170	>400	2.23	1.45	1.5	1.35	1.93	2.69	2.26	2.04
COLOR	<15		7							
COND.FLD	150-2000									
COND.LAB	**		349	219	151	256	253	395	400	353
DO-PPM	>6-8	<4								
DO-%SAT	100%									
DGAS.TOT	<103%	>110%								
DGAS.NIT	100%									
HARDNESS	20-400		153	94.2	67.4	109	110	183	180	155
H2S	<.002	>.004								
NITRITE	<.012	.2	.005	0	0	0	0	0	0	0
NITRATE	<.12		.317	.025	.0633	.014	.0425	.029	0	.018
PH-FLD	6.8-8.5	<5,>9								
PH-LAB	**	**	8.4	8	7.7	8.1	8.3	8.5	8.3	8.3
PHOSPH.	<.05		.105	.0521	.242	.082	.0826	.0565	.0525	.0513
RESID.TOT	<2000									
RESID.FIL	70-400		153	154	135	171	181	255	262	227
RESID.N.F	<3			7	143	17.5	19.5	0	0	15
SALIN.										
SILICA	<10-60		13.8					10.2	9.98	
SULFATE	<90		11.3	17.1	11.4	13.3	17.5	37.5	41	33
TASTE	OK									
T.D.SOL	500-1000	15000								
TEMP.	4-18C	<2,>25		9	14	12.5	18	18		
TURBID	1-60	>1000	1.5	1.6	2.4	2.5	4.3	0	1.1	1.6
METALS—										
AL	<.1	>5	0	.176	1.31	.248	.181	0	0	.126
AS	<.5	>1	0	0	0	0	0	0	0	0
BA	<1		.0059	.0157	.0304	.0172	.0159	.0233	.0213	.0206
CA	4-150	>300	37	26	17.5	28.6	28.5	49.1	48.1	40.9
CD	<.0004		0	0	0	0		0	0	0
CO			0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0
CU	<.006		0	0		.0012		0	0	0
FE	<.3		.108	.334	2.19	.419	.323	.128	.14	.382
HG	<.00005	>.0002	0	0	0	0	0	0	0	0
K		>50	2.76	1.81	1.98	2.04	2.24	3.39	3.15	2.78
MG	<10	>100	14.8	7.1	5.75	9.22	9.45	14.6	14.5	12.8
MN	<.05	>15	0	.0434	.126	.03	.0333	.0384	.0374	.0421
MO			0	0	0	0	0	0	0	0
NA		>500	19.8	6.88	5.68	9.14	8.76	12.8	13	11.8
NI			0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0		0	0	0
SB			0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0
SI	<10-60		14.8	10.1	9.47	10.9	10.9	10.6	10.4	10.1
SN			0	0	0	0	0	0	0	0
SR			.235	.23	.146	.234	.238	.421	.413	.362
TI			0	.0052	.043	.012	.0152	.0073	.0081	0
V			0	0	0	0	0	0	0	0
ZN	<.005		0	.0013		.0012		.0013	0	.0011

WATER QUALITY VALUES FOR SAVONA
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUN17/82 SAVONA OUTFLOW	OCT23/82 SAVONA OUTFLOW	JUN17/82 SAVONA INTAKE
ALK.TOT	20-300		31	34	31
AMMON.	<.002	0	.008	.007	.008
CO2	2-5	>20			
CHLOR.	<170	>400	.7	2.1	.7
COLOR	<15				
COND.FLD	150-2000				
COND.LAB	**		76.7	88	75.7
DO-PPM	>6-8	<4			
DO-%SAT	100%				
DGAS.TOT	<103%	>110%			
DGAS.NIT	100%				
HARDNESS	20-400		33.4		33.1
H2S	<.002	>.004			
NITRITE	<.012	.2	.008	0	.009
NITRATE	<.12		.18	.07	.15
PH-FLD	6.8-8.5	<5,>9			
PH-LAB	**	**	7.5	7.6	7.5
PHOSPH.	<.05		.009	.008	.009
RESID.TOT	<2000				
RESID.FIL	70-400		65	61	67
RESID.N.F	<3		0	0	0
SALIN.					
SILICA	<10-60		2.7	2.2	2.8
SULFATE	<90		6.2	6.6	6.7
TASTE	OK				
T.D.SOL	500-1000	15000			
TEMP.	4-18C	<2,>25			
TURBID	1-60	>1000	2.3	.8	2.3
METALS--					
AL	<.1	>5	.13		.14
AS	<.5	>1	0		0
BA	<1		.008		.008
CA	4-150	>300	10.2		10.1
CD	<.0004		0		0
CO			0		0
CR	<.01		0		0
CU	<.006		.003		.002
FE	<.3		.155		.198
HG	<.00005	>.0002	0		0
K		>50	.43		.4
MG	<10	>100	1.6		1.6
MN	<.05	>15	.006		.007
MO			0		0
NA		>500	1.4		1.3
NI			0		0
P			0		0
PB	<.01		0		0
SB			0		0
SE		>2.5	0		0
SI	<10-60		2.7		2.7
SN			0		0
SR			.062		.059
TI			.007		.006
V			0		0
ZN	<.005		.003		.003

WATER QUALITY VALUES FOR SEYMOUR
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUL25/82 SEYMOUR RIVER	AUG08/82 SEYMOUR RIVER	SEP12/82 SEYMOUR RIVER	OCT15/82 SEYMOUR RIVER	SEP12/82 MONOMEE CREEK	OCT15/82 MONOMEE CREEK	JUL25/82 RATCHFORD CREEK	AUG08/82 RATCH. CREEK	SEP12/82 RATCH. CREEK	OCT15/82 RATCH. CREEK
ALK.TOT	20-300		11	13	13	15	8	9	11	14	12	14.5
AMMON.	<.002	>.08	0	0	.005	.008	.057	.015	0	0	0	0
CO2	2-5	>20										
CHLOR.	<170	>400	0	0	0	0	0	0	0	0	0	0
COLOR	<15											
COND.FLD	150-2000											
COND.LAB	"		28.7	32.7	32.2	39.4	18.9	22.5	28.7	32.9	29.1	33.7
DO-PPM	>6-8	<4										
DO-%SAT	100%											
DGAS.TOT	<103%	>110%										
DGAS.HIT	100%											
HARDNESS	20-400		12.3	13.7	14.3	17.9	8.3	8.51	13.4	13.7	13.2	15.2
H2S	<.002	>.004										
NITRITE	<.012	.2	.006	0	0	0	0	0	.006	0	0	0
NITRATE	<.12		.13	.07	.07	.09	.01	.02	.1	.09	.07	.08
PH-FLD	6.8-8.5	<5,>9										
PH-LAB	"	"		7.4	7	7.4	7	7.4		7.4	7.2	7.4
PHOSPH.	<.05		0	.007	0	0	.019	.006	0	.006	0	0
RESID.TOT	<2000											
RESID.FIL	70-400		22	24	31	33	31	34	27	26	28	29
RESID.N.F	<3		9	0	7	6	5	8	15	0	7	7
SALIN.												
SILICA	<10-60		1.7	2	2.2	2.1	3.4	3.4	1.7	2.1	2.2	1.9
SULFATE	<90		3.1	4.5	3.6	4.5	2.6	3.4	2.3	10	2.8	3.5
TASTE	OK											
T.D.SOL	500-1000	15000										
TEMP.	4-18C	<2,>25										
TURBID	1-60	>1000	.2	.6	.1	.1	.1	0	.2	.1	.1	.1
METALS--												
AL	<.1	>5	.11	.08	.08	.07	.16	.07	.27	.08	.12	.07
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0
BA	<1		.005	.005	.005	.005	.004	.004	.009	.008	.008	.008
CA	4-150	>300	4	5	4.8	6.1	2.2	2.5	3.8	5	4.2	5
CD	<.0004		0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	0	0	0
FE	<.3		.125	1	.126	.113	.211	.077	.26	.061	.112	.05
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0
K		>50		.51	.51	.6	.51	.48		.66	.67	.67
MG	<10	>100	.3	.4	.4	.5	.4	.4	.5	.4	.4	.5
MN	<.05	>15	.008	.006	.004	.004	.008	.005	.005	.006	.004	.003
MO			0	0	0	0	0	0	0	0	0	0
NA		>500	.6	0	.6	.6	.8	.9	.4	0	.5	.6
NI			0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0
SI	<10-60		1.9	1.8	2	2.4	3.1	3.6	2.1	1.8	2	2.2
SN			.01	0	0	.01	0	0	0	0	0	0
SR			.019	.021	.021	.027	.015	.016	.019	.022	.021	.024
TI			.009	.003	.006	.002	.008	0	.02	0	.006	0
V			0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	0	0	0	0	0	0	0	0	0

WATER QUALITY VALUES FOR SHUSWAP
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	OCT27/82 RIVER HEADPOND	MAR30/82 RIVER PEN1 45'	OCT27/82 RIVER PEN1 45'	FEB08/83 RIVER PEN1 45'	MAR30/82 RIVER PEN2 25'	OCT27/82 RIVER PEN2 25'	MAR22/83 RIVER AT ISLAND	MAR12/84 RIVER AT ISLAND	MAR14/84 RIVER AT ISLAND
ALK.TOT	20-300		45	51	45	48	50	45	47.5	55	56
AMMON.	<.002	>.08	0	0	0	.019	0	0	0	0	0
CO2	2-5	>20									
CHLOR.	<170	>400	0	.7	0	.6	.9	0	.8	.6	.9
COLOR	<15										
COND.FLD	150-2000								57	79	78
COND.LAB	**		103	123.9	104	129	122.8	104	107	131.8	136
DO-PPM	>6-8	<4		12			11		12.1	13.6	13.2
DO-%SAT	100%		79.37	87.6	75.37		82.5	80.87	95.7	106.5	103.8
DGAS.TOT	<103%	>110%	104.13	102.3	102.43		100.7	101.05	105	101.7	101.4
DGAS.NIT	100%		110.74	106.2	109.65		105.5	106.45	107.5	106.5	103.8
HARDNESS	20-400		50.3	53	50.3	60.4	52.9	49.3	49.9	63.3	65.4
H2S	<.002	>.004									
NITRITE	<.012	.2	0	0	0	0	0	0	.005	0	0
NITRATE	<.12		.03	.08	.03	2.11	.13	.02	.11	.12	.13
PH-FLD	6.5-8.5	<5,>9	7.75		8			8.25	7.35	6.85	6.8
PH-LAB	**	**	7.8	7.9	7.8	7.7	7.8	7.8	7.8	7.7	7.6
PHOSPH.	<.05		.006	.005	.007	.01	0	.006	.008	.005	.008
RESID.TOT	<2000										
RESID.FIL	70-400		70	81	77	90	84	71	79	90	102
RESID.N.F	<3		0	0	0	0	0	0	0	0	0
SALIN.									0		
SILICA	<10-60		2.8	3.5	2.8	3.5	3.4	2.8	3.3		
SULFATE	<90		6.8	8.3	6.7	7.8	8.4	6.7	6.7	9.1	8.9
TASTE	OK										
T.D.SOL	500-1000	15000									
TEMP.	4-18C	<2,>25	9	2	13		3	10	3.7	2.95	2.6
TURBID	1-60	>1000	0	.2	.1	.1	.2	.1	.5		
METALS--											
AL	<.1	>5	0	0	0	0	0	0	0	.06	.1
AS	<.5	>1	0	0	0	0	0	0	0	0	0
BA	<1		.009	.009	.009	.009	.009	.008	.009	.011	.007
CA	4-150	>300	17.1	17.4	17.1	20.8	17.4	16.7	16.6	20.8	21.2
CD	<.0004		0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0
CR	<.01		0	.008	0	0	0	0	0	0	0
CU	<.006		0	0	0	.003	0	0	0	0	0
FE	<.3		.042	.043	.026	.028	.037	.027	.04	.065	.113
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0
K		>50	.79	1.02	.81	.8	.85	.79	.79	1.05	1.09
MG	<10	>100	1.8	2.3	1.8	2	2.2	1.8	2	2.6	2.8
MN	<.05	>15	.005	.003	.004	.003	.003	.003	.005	.006	.009
MO			0	0	0	0	0	0	0	0	0
NA		>500	1.2	1.3	1.2	1.2	1.3	1.1	1.1	1.4	1.4
NI			0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0
SI	<10-60		2.6	3.1	2.6	3.1	3.1	2.6	3.1	3.7	3.8
SN			0	0	0	0	0	0	0	0	0
SR			.075	.079	.073	.007	.08	.072	.072	.095	.098
TI			0	0	0	0	0	0	0	0	.003
V			0	0	0	0	0	0	0	0	0
ZN	<.005		.004	0	0	.002	0	0	0	0	0

WATER QUALITY VALUES FOR SHUSWAP-(continued)
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	MAR21/83 1600 HR WELL #4	MAR22/83 0830 HR WELL #4	MAR22/83 1600 HR WELL #4	MAR23/83 1030 HR WELL #4	MAR19/83 1500 HR WELL #5	MAR20/83 0830 HR WELL #5	MAR20/83 1200 HR WELL #5
ALK.TOT	20-300		50	50	51	51	78	88	90
AMMON.	<.002	>.08	0	0	0	0	.007	.008	.009
CO2	2-5	>20							
CHLOR.	<170	>400	.9	.9	.8	.9	.8	.9	.9
COLOR	<15		0	0	0	0	0	0	0
COND.FLD	150-2000		68	69	69	68	120	132	132
COND.LAB	"		118	117	117	117	179	209	214
DO-PPM	>6-8	<4	8.9	8	8.3	8.1	.5	.3	.4
DO-%SAT	100%		76	68.9	72.1	70.7	4.5	2.6	3.6
DGAS.TOT	<103%	>110%	105.3	102.1	103.2	102.5	90.6	90.4	89.4
DGAS.HIT	100%		113.1	114	111.5	111	113.5	113.7	112.2
HARDNESS	20-400		55.1	53.8	55.1	57.7	89.8	94.6	97.7
H2S	<.002	>.004							
NITRITE	<.012	.2	.012	.007	0	0	.099	.017	.011
NITRATE	<.12		.17	.15	.16	.15	.04	.07	.04
PH-FLD	6.8-8.5	<5,>9	7.15	7.2	7.1	7.1	7.8	7.7	7.7
PH-LAB	"	"	7.5	7.5	7.4	7.4	7.8	8	8
PHOSPH.	<.05		0	.005	.007	.007	.022	.022	.022
RESID.TOT	<2000								
RESID.FIL	70-400		84	79	80	72	127	137	136
RESID.N.F	<3		0	0	0	0	0	0	0
SALIN.			0	0	0	0	0	0	0
SILICA	<10-60		3.3	3.4	3.4	3.4	5.9	5.9	5.9
SULFATE	<90		8	7.4	7.1	6.9	15.3	16.7	17
TASTE	OK								
T.D.SOL	500-1000	15000							
TEMP.	4-18C	<2,>25	6.7	7	7.1	7.1	8.9	8.85	8.9
TURBID	1-60	>1000	.1	.1	.2	.2	.8	.8	.8
METALS—									
AL	<.1	>5	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0
BA	<1		.009	.008	.009	.009	.016	.018	.018
CA	4-150	>300	18.6	18.2	18.6	19.5	29.1	30.9	31.9
CD	<.0004		0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0
CR	<.01		0	0	.013	0	0	0	0
CU	<.006		0	0	0	0	0	0	0
FE	<.3		.01	.006	.038	0	.157	.205	.209
HG	<.00005	>.0002	0	0	0	0	0	0	0
K		>50	.78	.78	.81	.79	1.6	1.67	1.69
MG	<10	>100	2.1	2	2	2.1	4	4.1	4.2
MN	<.05	>15	0	0	.003	0	.038	.045	.046
MO			0	0	0	0	.02	0	0
NA		>500	1.2	1.1	1.1	1.2	3.3	3.9	4
NI			0	0	0	0	0	0	0
P			0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0
SI	<10-60		3.1	3.1	3.2	3.4	5.9	5.5	5.6
SN			0	0	.01	0	0	0	0
SR			.079	.079	.081	.084	.203	.203	.208
TI			0	0	0	0	0	0	0
V			0	0	0	0	0	0	0
ZN	<.005		0	0	.005	0	0	0	0

WATER QUALITY VALUES FOR SNUSWAP-(continued)
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	MAR15/84 1230 HRS WELL #6	MAR15/84 2130 HRS WELL #6	MAR16/84 0800 HRS WELL #6	MAR17/84 1100 HRS WELL #8	MAR17/84 2100 HRS WELL #8	MAR12/84 0900 HRS WELL #8	MAR12/84 2100 HRS WELL #8	MAR13/84 0900 HRS WELL #8	MAR13/84 1900 HRS WELL #9	MAR14/84 0500 HRS WELL #9	MAR14/84 1700 HRS WELL #9
ALK.TOT	20-300		60	57	57	61	61	63.5	69	76	57	62.5	69
AMMON.	<.002	>.08	0	0	0	0	0	0	0	0	0	0	0
CO2	2-5	>20											
CHLOR.	<170	>400	.6	.6	.6	.7	.6	.6	.8	1.1	.7	.8	.8
COLOR	<15												
COND.FLD	150-2000		98	97	94	93	101	107	116	133	98	106	118
COND.LAB	**		139.4	141	138	138.4	139.4	147	172	196	135	155	173
DO-PPM	>6-8	<4	6.4	7.8	7.3	5.4	5.6	5.8	5.6	5.3	6.5	6.5	6.5
DO-%SAT	100%		56.9	69.4	65	49.2	51	52.8	51	48.3	58.8	59.2	58.8
DGAS.TOT	<103%	>110%	93.1	98.2	97.5	95.7	95.5	95.8	96.3	96.2	97	96.5	96.6
DGAS.NIT	100%		102.8	105.9	106.2	108.1	107.3	107.1	108.3	108.9	107	106.4	106.7
HARDNESS	20-400		65.2	66.1	65.3	67.6	68.2	72.1	81.8	93.6	64.6	72.5	80.6
H2S	<.002	>.004											
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.11	0	.11	.1	.11	.15	.18	.21	.13	.15	.17
PH-FLD	6.8-8.5	<5,>9	7.1	7.2	7.2	6.3	6.7	6.5	6.4	6.5	7.1	7.5	7.1
PH-LAB	**	**	8	7.8	7.8	8	8	8	7.9	7.8	7.9	7.9	8
PHOSPH.	<.05		.003	.003	.024	.003	.003	.003	.002	.002	.002	.002	.002
RESID.TOT	<2000												
RESID.FIL	70-400		94	96	97	92	94	97	107	126	93	108	116
RESID.N.F	<3		0	0	0	0	0	0	0	0	0	0	0
SALIN.													
SILICA	<10-60												
SULFATE	<90		7.7	7.8	7.6	7.5	7.6	9.8	11.6	15.2	7.6	10.1	12.6
TASTE	OK												
T.D.SOL	500-1000	15000											
TEMP.	4-18C	<2,>25	8.4	8.2	8.2	8.8	8.7	8.7	8.7	8.7	8.6	8.6	8.7
TURBID	1-60	>1000											
METALS--													
AL	<.1	>5	0	0	0	0	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0
BA	<1		.007	.006	.006	.008	.008	.009	.007	.007	.001	.007	.01
CA	4-150	>300	22.2	22.5	22.3	23.1	23.3	24.7	28	32	22.1	24.8	27.6
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	0	0	0	0
FE	<.3		.016	.016	.016	.019	.009	.008	.009	.006	.01	.006	.006
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0	0
K		>50	1.06	.92	.94	1.01	1.03	1.05	1.06	1.12	1	1.05	1.08
MG	<10	>100	2.3	2.3	2.3	2.4	2.4	2.5	2.8	3.3	2.2	2.5	2.8
MN	<.05	>15	.004	.001	0	0	0	0	0	0	0	0	.001
MO			0	0	0	0	0	0	0	0	0	0	0
NA		>500	1.6	1.7	1.6	1.5	1.4	1.4	1.4	1.5	1.3	1.4	1.4
NI			0	0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60		3.9	4	4	4.3	4.3	4.3	4.3	4.3	4.1	4.1	4.1
SN			0	0	0	0	0	0	0	0	0	0	0
SR			.096	.1	.098	.097	.098	.105	.119	.138	.095	.105	.117
TI			0	0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0	0
ZN	<.005		.002	.003	0	0	0	0	0	0	0	0	0

WATER QUALITY VALUES FOR SLIM
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	APR13/81 SLIM CREEK	APR24/81 SLIM CREEK	MAY11/81 SLIM CREEK	MAY28/81 SLIM CREEK	JUN22/81 SLIM CREEK	SEP09/81 SLIM CREEK	SEP22/81 SLIM CREEK	OCT12/81 SLIM CREEK
ALK.TOT	20-300		116	86	94.1	76	91.7	119	99.1	115
AMMON.	<.002	>.08	.021	.021	.01	.0053	.0074	0	.007	.0083
CO2	2-5	>20								
CHLOR.	<170	>400	.91	.67	.62	.55	.53	.55	0	.62
COLOR	<15									
COND.FLD	150-2000									
COND.LAB	**		240	186	197	145	185	232	206	235
DO-PPM	>6-8	<4	8		11		9	10	10	11
DO-%SAT	100%									
DGAS.TOT	<103%	>110%								
DGAS.WIT	100%									
HARDNESS	20-400							118	97	117
H2S	<.002	>.004								
NITRITE	<.012	.2	0	0	0	0	0	0	0	0
NITRATE	<.12		.131	.222	.206	.093	.114	.03	.0508	.064
PH-FLD	6.8-8.5	<5,>9	7.8		8		7.5	8	8.5	8
PH-LAB	**	**	8.2	8	8.2	8	8.3	8.4	8.1	8.3
PHOSPH.	<.05		.0178	.0958	.043	.0516	.0124	0	.0068	0
RESID.TOT	<2000									
RESID.FIL	70-400		144	104	115	87	113	132	122	142
RESID.N.F	<3		11	128	58	92	20	0	0	0
SALIN.										
SILICA	<10-60		2.62	2.16	1.95	1.72	1.83	1.94	2.2	1.89
SULFATE	<90		5.4	4.2	4.06	3.1	4.2	5.6	3.95	6
TASTE	OK									
T.D.SOL	500-1000	15000								
TEMP.	4-18C	<2,>25	3		5.5		8.5	10		4
TURBID	1-60	>1000	3.4	39	15	25	4.5	0	1.4	1.2
METALS--										
AL	<.1	>5	.07	.912	.339	.481	.153	0		0
AS	<.5	>1	0	0	0	0	0	0		0
BA	<1		.0364	.04	.0361	.0206	.0245	.0364		.0336
CA	4-150	>300	39.8	29.4	33.8	16.6	31.5	39.6		39.3
CD	<.0004		0	0	0	0	0	0		0
CO			0	0	0	0	0	0		0
CR	<.01		0	0	0	0	0	0		0
CU	<.006		0	.0021	0	0	0	0		0
FE	<.3		.293	1.61	.701	.418	.185	.0875		.075
HG	<.00005	>.0002	0	0	0	0	0	0		0
K		>50	.35	.409	.331	.237	.272	.35		.332
MG	<10	>100	5.01	4.51	3.86	2.41	3.1	4.7		4.53
MN	<.05	>15	.0263	.0614	.0358	.0164	.016	.0146		.0115
MO			0	0	0	0	0	0		0
NA		>500	1.57	1.03	.83	.59	.72	1.49		1.45
NI			0	0	0	0	0	0		0
P			0	0	0	0	0	0		0
PB	<.01		0	.0016	0	0	0	0		0
SB			0	0	0	0	0	0		0
SE		>2.5	0	0	0	0	0	0		0
SI	<10-60		2.77	3.83	2.56	2.44	1.96	1.91		2.16
SN			0	0	0	0	0	0		0
SR			.193	.16	.167	.1775	.163	.025		.203
TI			0	.029	.0151	.0438	.013	.0075		.016
V			0	0	0	0	0	0		0
ZN	<.005		.0023	.0047	.0018	.0019	.0016	.0034		.0025

WATER QUALITY VALUES FOR SOUTH PASS
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUL25/82 S.PASS CREEK	AUG22/82 S.PASS CREEK	SEP12/82 S.PASS CREEK	OCT15/82 S.PASS CREEK
ALK.TOT	20-300		17	21	19	22
AMMON.	<.002	>.08	0	0	.006	.009
CO2	2-5	>20				
CHLOR.	<170	>400	0	.5	.7	.6
COLOR	<15					
COND.FLD	150-2000					
COND.LAB	**		54.8	66.5	60.4	70.3
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.NIT	100%					
HARDNESS	20-400		23.3	27.6	25.5	30.2
H2S	<.002	>.004				
NITRITE	<.012	.2	.006	0	0	0
NITRATE	<.12		.05	.06	.06	.08
PH-FLD	6.8-8.5	<5,>9				
PH-LAB	**	**		7.5	7.2	7.5
PHOSPH.	<.05		0	.007	0	0
RESID.TOT	<2000					
RESID.FIL	70-400		44	56	50	54
RESID.N.F	<3		11	0	0	8
SALIN.						
SILICA	<10-60		3.2	3.8	3.7	3.2
SULFATE	<90		9.2	11.5	9.2	12.1
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25				
TURBID	1-60	>1000	.5	.2	.2	.1
METALS--						
AL	<.1	>5	.11	.08	.09	.01
AS	<.5	>1	0	0	0	0
BA	<1		.008	.007	.007	.007
CA	4-150	>300	7.6	9	8.3	10
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	0	0
CU	<.006		0	0	0	0
FE	<.3		.095	.084	.128	.088
HG	<.00005	>.0002	0	0	0	0
K		>50		.79	.74	.86
MG	<10	>100	.9	1	.9	1.1
MN	<.05	>15	.002	.004	.004	.004
MO			0	0	0	0
NA		>500	.9	.4	.9	1
NI			0	0	0	0
P			0	0	0	0
PB	<.01		0	0	0	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		3.4	3.4	3.3	3.7
SN			0	0	0	.01
SR			.061	.07	.062	.073
TI			.004	0	.003	0
V			0	0	0	0
ZN	<.005		0	0	0	0

WATER QUALITY VALUES FOR SOUTH THOMPSON
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	APRIL21/8 AT CHASE	MAY26/81 AT CHASE	JUN30/81 AT CHASE	JUL28/81 AT CHASE	JUL29/81 AT CHASE	SEP01/81 AT CHASE	SEP24/81 AT CHASE	OCT20/81 AT CHASE
ALK.TOT	20-300		36.5	33.5	33.3	32.8	32.8	34.1	33.6	35.9
AMMON.	<.002	>.08	0	0	0	0	0	0	.005	.0069
CO2	2-5	>20								
CHLOR.	<170	>400	0	.62	.58	0	0	.75	.67	.76
COLOR	<15									
COND.FLD	150-2000									
COND.LAB	**		90.5	82	81.5	74	74	83.9	82	92.2
DO-PPM	>6-8	<4								
DO-%SAT	100%									
DGAS.TOT	<103%	>110%								
DGAS.NIT	100%									
HARDNESS	20-400		40.2	27.2	34.2	31.4	31.4	36.9	35.6	41.6
H2S	<.002	>.004								
NITRITE	<.012	.2	0	0	0	0	0	0	0	0
NITRATE	<.12		.05	.074	.067	.025	.025	.142	0	.064
PH-FLD	6.8-8.5	<5,>9								
PH-LAB	**	**	7.8	7.8	7.7	7.8	7.8	7.7	8.1	7.9
PHOSPH.	<.05		.0074	0	.0087	.0075	.0075	0	.008	.0052
RESID.TOT	<2000									
RESID.FIL	70-400		60	54	56.5	54	54	61	57	66
RESID.N.F	<3		0	0	0	0	6	0	0	0
SALIN.										
SILICA	<10-60						2.62		2.69	
SULFATE	<90		7.1	5.69	6.1	5	5	6.7	5.45	7.75
TASTE	OK									
T.D.SOL	500-1000	15000								
TEMP.	4-18C	<2,>25	6	10	12	18		18		
TURBID	1-60	>1000	0	0	0	0	0	0	0	0
METALS--										
AL	<.1	>5	.052	.093	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0
BA	<1		.0098	.0076	.0089	.0089	.0089	.01	.0085	.01
CA	4-150	>300	12.8	8.76	11	10.3	10.3	11.9	11.6	13.3
CD	<.0004		0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	0
FE	<.3		.082	.0913	.032	.0111	.0111	.04	.0301	.0235
HG	<.00005	>.0002	0	0	0	0	0	0	0	0
K		>50	.763	.752	.703	.694	.694		.712	.807
MG	<10	>100	1.99	1.3	1.63	1.38	1.38	1.74	1.6	2.03
MN	<.05	>15	.0043	.0081	.0029	.0034	.0034	.0071	.0055	0
MO			0	0	0	0	0	0	0	0
NA		>500	1.49	1	1.23	1.1	1.26	1.48	1.42	1.78
NI			0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0
SI	<10-60		3.07	2.84	2.89	2.62	3.2	2.72	2.5	2.85
SN			0	0	0	0	0	0	0	0
SR			.0789	.0548	.0661	.0661	.0509	.071	.0702	.0863
TI			0	0	0	.0086	0	.0086	.0086	0
V			0	0	0	0	0	0	0	0
ZN	<.005		0	.0015	0	.002	.002	0	.002	0

WATER QUALITY VALUES FOR SPIUS
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	AUG04/82 SPIUS CREEK	OCT23/82 SPIUS CREEK	MAR06/83 SPIUS CREEK	FEB08/83 SPIUS CREEK	APR04/84 SPIUS CREEK	FEB15/84 1415 HRS WELL A	FEB15/84 1800 HRS WELL A
ALK.TOT	20-300		41	54	52	58	37	174	171
AMMON.	<.002	>.08	.008	.008	.007	0	0	.016	.013
CO2	2-5	>20							
CHLOR.	<170	>400	0	.8	.9	.7	.6	1.3	1.3
COLOR	<15								
COND.FLD	150-2000				60		47	282	280
COND.LAB	**		88.5	117	110	123	209	398	400
DO-PPM	>6-8	<4					11.4	10.8	11.05
DO-%SAT	100%				94.7		89.8	101.9	104.2
DGAS.TOT	<103%	>110%			101		100.55	100.9	101.4
DGAS.NIT	100%				102.7		103.4	100.5	100.7
HARDNESS	20-400		37.2		51.1	53.7	39.4	182	182
H2S	<.002	>.004							
NITRITE	<.012	.2	0	0	0	0	0	0	0
NITRATE	<.12		.12	0	0	.07	0	.06	.03
PH-FLD	6.8-8.5	<5,>9	7.5		7.8	7	7	8.2	8.4
PH-LAB	**	**	8.1	7.9	8.1	7.9	7.6	7.8	7.9
PHOSPH.	<.05		.007	.007	.021	.007	.005	.008	.008
RESID.TOT	<2000								
RESID.FIL	70-400		54	81	80	82	73	260	262
RESID.N.F	<3		0	0	12	0	0	0	0
SALIN.									
SILICA	<10-60		3.6	3.6	5.3	5.1			
SULFATE	<90		4.4	5.8	5.2	5.9	4.2	35.4	37.5
TASTE	OK								
T.D.SOL	500-1000	15000							
TEMP.	4-18C	<2,>25	15	4	5	0	5.2	10.02	10.01
TURBID	1-60	>1000	.1	0	7.5	0	.5		
METALS—									
AL	<.1	>5	0		.21	0	.08	0	0
AS	<.5	>1	0		0	0	0	0	0
BA	<1		.017		.021	.02	.016	.028	.028
CA	4-150	>300	11.2		14.5	15.7	11.6	48.6	48.2
CD	<.0004		0		0	0	0	0	0
CO			0		0	0	0	0	0
CR	<.01		0		0	0	0	0	0
CU	<.006		0		0	0	0	0	0
FE	<.3		.019		.203	.021	.058	.005	0
HG	<.00005	>.0002	0		0	0	0	0	0
K		>50	.45	.91	.5	.5	.51	2.04	2.1
MG	<10	>100	2.2		3.2	3.4	2.4	15.1	15
MN	<.05	>15	.002		.008	.001	.002	.082	.081
MO			0		0	0	0	0	0
NA		>500	2.3		3.1	3.4	2.6	14.3	14.3
NI			0		0	0	0	0	0
P			0		0	0	0	0	0
PB	<.01		0		0	0	0	0	0
SB			0		0	0	0	0	0
SE		>2.5	0		0	0	0	0	0
SI	<10-60		3.7		5.2	4.8	5.3	7.3	7.1
SN			0		0	0	0	0	0
SR			.065		.088	.097	.071	.228	.224
TI			0		.05	0	0	0	0
V			0		0	0	0	0	0
ZN	<.005		0		0	0	.003	0	0

WATER QUALITY VALUES FOR SPIUS (continued)
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	MAR05/83 1630 HRS WELL B	MAR06/83 0930 HRS WELL B	MAR06/83 1600 HRS WELL B	MAR07/83 1630 HRS WELL B	MAR08/83 1630 HRS WELL B	MAR09/83 1630 HRS WELL B	APR03/84 0025 HRS WELL C	APR03/84 1030 HRS WELL C	APR03/84 2230 HRS WELL C	APR04/84 2305 HRS WELL C	APR05/84 1400 HRS WELL C
ALK.TOT	20-300		178	178	178	182	179	180	177	182	182	176	176
AMMON.	<.002	>.08	.016	.017	.016	.01	.01	.016	.014	.018	.013	.015	.015
CO2	2-5	>20											
CHLOR.	<170	>400	1.6	1.6	1.5	1.6	1.6	1.7	1.8	1.9	1.8	1.7	2.2
COLOR	<15					0	0	0					
COND.FLD	150-2000		280	278	280	279	279	277	293	295	292	293	293
COND.LAB	**		400	400	400	411	414	406	416	410	413	413	414
DO-PPM	>6-8	<4		.9	.5	.6	.5	.5	0	0	0	0	0
DO-%SAT	100%			8.5	4.7	5.7	4.7	4.7	0	0	0	0	0
DGAS.TOT	<103%	>110%	92.3	94.3	95.9	95.9	96.6	96.6	95.45	95.95	95.7	96.15	97.3
DGAS.HIT	100%			117.1	120.1	119.9	121	121	120.55	121.2	120.9	121.4	122.9
HARDNESS	20-400		179	176	177	182	181	187	187	188	192	186.4	187.9
H2S	<.002	>.004											
NITRITE	<.012	.2	0	.005	0	0	0	.008	0	0	0	0	0
NITRATE	<.12		0	0	0	0	.01	0	0	0	0	0	0
PH-FLD	6.8-8.5	<5,>9	7.9	7.9	7.9	7.9	7.9	7.9	6.7	6.6	6.9	6.9	7
PH-LAB	**	**	8.1	8.1	8.1	7.9	8	8	7.7	7.7	7.7	7.6	7.6
PHOSPH.	<.05		.01	.009	.009	.008	.009	.009	0	0	.004	.004	.004
RESID.TOT	<2000												
RESID.FIL	70-400		251	250	245	254	256	270	265	272	274	269	264
RESID.N.F	<3		0	0	0	0	0	0	0	0	0	0	0
SALIN.						0	0						
SILICA	<10-60		7.4	7.4	7.4	7.4	7.4	7.4					
SULFATE	<90		34.5	34.5	34.2	34.5	34.7	34.5	32.2	32.4	32.3	33.8	34.5
TASTE	OK												
T.D.SOL	500-1000	15000											
TEMP.	4-18C	<2,>25	10.6	10.6	10.7	10.6	10.6	10.6	10.4	10.4	10.4	10.4	10.4
TURBID	1-60	>1000	.1	.1	.1	0	0	0	.1	.1	0	0	0
METALS--													
AL	<.1	>5	0	0	0	0	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0
BA	<1		.028	.028	.028	.028	.028	.028	.03	.031	.03	.031	.03
CA	4-150	>300	47.2	46.1	46.6	47.1	46.8	50.6	51.1	52.5	52.6	51.5	52.5
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	.001	0	0	0
FE	<.3		.037	.02	.02	.017	.02	.014	.042	.044	.036	.032	.027
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0	0
K		>50	1.97	1.97	1.95	1.59	1.59	1.59	2	2	2.1	2	2
MG	<10	>100	14.7	14.5	14.6	15.5	15.5	14.7	14.5	13.8	14.5	13.8	13.8
MN	<.05	>15	.1	.099	.1	.008	.101	.101	.116	.124	.125	.13	.129
MO			0	0	0	0	0	0	0	0	0	0	0
NA		>500	16.4	16.1	16.3	16.9	17	16.6	14.4	15.1	14.9	15.2	15
NI			0	0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60		7.1	7	7	7.5	7.5	7.2	7.8	7.8	7.7	7.9	7.8
SN			0	0	0	0	0	0	.01	0	0	0	0
SR			.235	.233	.235	.239	.239	.2398	.246	.254	.252	.255	.254
TI			0	0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	0	0	0	0	0	.018	.006	0	.006	.006

WATER QUALITY VALUES FOR STUART
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	APR20/80 1230 HR	MAY14/80 1600 HR	JUN08/80 1300 HR	SEP09/80	OCT02/80
			----------DAVIDSONS LANDING----------				
ALK.TOT	20-300		53.1	49	47	46.4	49
AMMON.	<.002	>.08	.0154	0	0	.0101	0
CO2	2-5	>20					
CHLOR.	<170	>400	1.69	5.9	.53	.55	1.86
COLOR	<15		50	25	10	10	7
COND.FLD	150-2000						
COND.LAB	"		122	109.4	103	103	115
DO-PPM	>6-8	<4		8	8	7-7.5	7.5
DO-%SAT	100%				78	73-78.5	71.9
DGAS.TOT	<103%	>110%					
DGAS.NIT	100%						
HARDNESS	20-400		58	55.4	50.1	47.3	54.8
H2S	<.002	>.004					
NITRITE	<.012	.2	.0081	0	0	0	0
NITRATE	<.12		.248	0	0	.862	0
PH-FLD	6.8-8.5	<5,>9		7.4	7.3		
PH-LAB	"	"	7.6	7.8	7.7	7.6	7.9
PHOSPH.	<.05		.0686	.0203	.0154	0	0
RESID.TOT	<2000						
RESID.FIL	70-400		100	79	72	71	75
RESID.N.F	<3		30	12	9	0	5
SALIN.			0	0	0	0	0
SILICA	<10-60		2.95	2.33	2.28		
SULFATE	<90		8.3	5.9	4.85	5.8	5.9
TASTE	OK						
T.D.SOL	500-1000	15000					
TEMP.	4-18C	<2,>25	7	15	15	14	10.5
TURBID	1-60	>1000	33	6.8	4.5	2	1.9
METALS--							
AL	<.1	>5	.618	.274	.137	0	0
AS	<.5	>1	0	0	0	0	0
BA	<1		.0402	.0277	.0226	.0231	.0235
CA	4-150	>300	13.8	15	14.7	13.1	14.9
CD	<.0004		0	0	0	0	0
CO			0	0	0	0	0
CR	<.01		0	0	0	0	0
CU	<.006		.0028	.0017	.0014	.0056	0
FE	<.3		1.09	.245	.126	.108	.081
HG	<.00005	>.0002	0	0	0	0	0
K		>50	1.17	.692	.51	.454	.504
MG	<10	>100	5.74	4.35	3.26	3.54	4.27
MN	<.05	>15	.0676	.0177	.0133	.0091	.0108
MO			0	0	0	0	0
NA		>500	2.2	1.93	2.2	1.71	2.1
NI			0	0	0	0	0
P			0	0	0	0	0
PB	<.01		0	0	0	0	0
SB			0	0	0	0	0
SE		>2.5	0	0	0	0	0
SI	<10-60		3.76	2.87	2.44	2.23	1.92
SN			0	0	0	0	0
SR			.0714	.0618	.0596	.0601	.0648
TI			0	.013	0	0	0
V			0	0	0	0	0
ZN	<.005		.0078	0	.0044	.0015	.0028

WATER QUALITY VALUES FOR STUART
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	APR08/80 4.5 HR WELL#2	APR09/80 16.5 HR WELL#2	APR09/80 26 HR WELL#2	APR10/80 41 HR WELL#2	JUN10/82 STUART PILOT WL	APR09/80 VILLAGE WELL	APR09/80 PRIVATE WELL	JUN06/79 FS JAMES CITY WEL
ALK.TOT	20-300		314	320	308	315	308	320	282	310
ARSEN.	<.002	>.08	.1657	.164	.17	.169	.173	.132	0	.11
CO2	2-5	>20								
CHLOR.	<170	>400	1.24	1.24	1.3	1.57	1.2	1.39	.9	.0088
COLOR	<15		0	0	0	0		0	0	
COND.FLD	150-2000		430	428	443	446		420	385	
COND.LAB	**		650	660	660	660	655	639	540	630
DO-PPM	>6-8	<4	1.1	1.4	.4	.4		1	1.2	0
DO-%SAT	100%		10.4	13.1	3.7	3.6		9.1	10.6	
DGAS.TOT	<103%	>110%	104.1	104.3	103.7	104.1		105	102.9	
DGAS.HIT	100%		129	128.6	130.3	130.8		130.5	127.4	
HARDNESS	20-400		346	339	339	337	337	340	297	333
H2S	<.002	>.004								
NITRITE	<.012	.2	.0054	0	.0071	.0077	0	.0055	.0098	0
NITRATE	<.12		0	.0161	.0126	.0188	0	.0121	.0703	0
PH-FLD	6.8-8.5	<5,>9	7.3	7.8	7.7	7.5		7.6	7.1	
PH-LAB	**	**	8	8.1	7.8	7.7	7.9	8	7.5	8
PHOSPH.	<.05		.1403	.036	.0279	.0278	.01	.0268	.0069	.0235
RESID.TOT	<2000									
RESID.FIL	70-400		422	424	424	420	447	400	316	406
RESID.N.F	<3		187	0	0	0	5	0	0	0
SALIN.			1	1	0	0		1	0	
SILICA	<10-60		11.6	11.8	11.8	11.7	12.1	11.8	7.05	11.8
SULFATE	<90		62.5	58.3	66.5	69.2	60.5	48.2	17.6	46.5
TASTE	OK		DISTINCT MINERAL TASTE							
T.D.SOL	500-1000	15000								
TEMP.	6-18C	<2,>25	8.6	8.4	8.6	8.6		7.1	5.9	9.25
TURBID	1-60	>1000	31	4.9	4.2	4.4	9	7.1	0	4.6
METALS--										
AL	<.1	>5	.352	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0
BA	<1		.142	.0881	.0745	.0624	.057	.0641	.127	.0532
CA	4-150	>300	45.5	43.1	43.3	42.8	40	54.2	76.2	48.6
CD	<.0004		0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0	0
FE	<.3		1.7	.383	.365	.351	2.2	.613	.021	.669
HG	<.00005	>.0002	0	0	0	0	0	0	.00013	0
K		>50	3.76	3.59	3.53	3.49	3.58	3.08	1.22	3.15
MG	<10	>100	56.5	56.3	56.1	56	56.4	49.7	26	51.4
MN	<.05	>15	.0996	.02	.0197	.0187	.013	.0293	0	.031
MO			0	0	0	0	.009	0	0	0
NA		>500	16.9	20.3	20.2	18.5	19	14.6	6.01	6.35
NI			0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0
SI	<10-60		11.8	12.1	12	11.7	12.7	12.1	6.85	11
SN			0	0	.2	.22	0	0	.22	0
SR			.54	.546	.546	.537	.552	.462	.243	.429
TI			.0122	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0
ZN	<.005		.0034	.002	.0015	.0016	0	.0016	.0028	0

WATER QUALITY VALUES FOR TAPPEN
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUL25/82 TAPPEN CREEK	AUG22/82 TAPPEN CREEK	SEP12/82 TAPPEN CREEK	OCT15/82 TAPPEN CREEK
ALK.TOT	20-300		163	170	170	172
AMMON.	<.002	>.08	0	0	.005	0
CO2	2-5	>20				
CHLOR.	<170	>400	1	1.2	1.2	1.1
COLOR	<15					
COND.FLD	150-2000					
COND.LAB	**		358	361	366	372
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.NIT	100%					
HARDNESS	20-400		180	181	184	188
H2S	<.002	>.004				
NITRITE	<.012	.2	.007	0	0	0
NITRATE	<.12		.05	.1	.1	.1
PH-FLD	6.8-8.5	<5,>9				
PH-LAB	**	**		8.2	8.1	8.2
PHOSPH.	<.05		.021	.025	.018	.018
RESID.TOT	<2000					
RESID.FIL	70-400		228	235	240	237
RESID.N.F	<3		12	17	14	15
SALIN.						
SILICA	<10-60		8.5	8.9	8.8	2.9
SULFATE	<90		22	22	23.9	25.8
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25				
TURBID	1-60	>1000	2.5	2.3	1.3	1.2
METALS--						
AL	<.1	>5	.14	.08	.11	.05
AS	<.5	>1	0	0	0	0
BA	<1		.034	.032	.033	.031
CA	4-150	>300	61	62	62.4	64.2
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	0	0
CU	<.006		0	0	0	0
FE	<.3		.24	.15M	.212	.134
HG	<.00005	>.0002	0	0	0	0
K		>50		2.45	2.57	2.6
MG	<10	>100	6.4	6.2	6.4	6.4
MN	<.05	>15	.012	.011	.012	.009
MO			0	0	0	0
NA		>500	5.4	5	5.6	5.5
NI			0	0	0	0
P			0	.05	0	0
PB	<.01		0	0	0	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		9.1	6.4	8.6	8.6
SN			0	0	0	0
SR			.585	.596	.587	.599
TI			.005	0	.004	.002
V			0	0	0	0
ZN	<.005		0	0	0	0

WATER QUALITY VALUES FOR TASERO
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	SEP28/81 TASERO	FEB15/82 TASERO	SEP02/82 TASERO	FEB10/83 TASERO
ALK.TOT	20-300		270	275	274	274
AMMON.	<.002	>.08	.0082	.006	.007	.011
CO2	2-5	>20				
CHLOR.	<170	>400	1.9	1.61	1.7	1.7
COLOR	<15					
COND.FLD	150-2000					
COND.LAB	**		496	494	480	497
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.NIT	100%					
HARDNESS	20-400		239	241	243	239
H2S	<.002	>.004				
NITRITE	<.012	.2	0	0	0	0
NITRATE	<.12		.088	.217	.08	.21
PH-FLD	6.8-8.5	<5,>9				
PH-LAB	**	**	8.5	8.4	8.6	8.4
PHOSPH.	<.05		.0274	.043	.03	.04
RESID.TOT	<2000					
RESID.FIL	70-400		313	320	303	312
RESID.N.F	<3		0	0	0	0
SALIN.						
SILICA	<10-60		14.7	15.8	16.2	17.1
SULFATE	<90		2.2	5.8	4.3	3.7
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25				
TURBID	1-60	>1000	0	1.1	.1	.5
METALS--						
AL	<.1	>5	0	0	0	0
AS	<.5	>1	0	0	0	0
BA	<1		.0206	.021	.021	.021
CA	4-150	>300	46.7	47.3	47	46.6
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	.022	.005
CU	<.006		0	0	0	0
FE	<.3		.0327	.069	.04	.052
HG	<.00005	>.0002	0	0	0	.0002
K		>50	3.81	3.98	3.17	3.9
MG	<10	>100	29.7	29.6	30.5	29.6
MN	<.05	>15	.8	0	.004	.005
MO			0	0	0	0
NA		>500	15.8	15.1	15.9	15.4
NI			0	0	0	0
P			0	.06	.07	.1
PB	<.01		0	0	.03	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		15.7	16.2	15.7	15.7
SN			0	0	0	0
SR			.185	.299	.309	.304
TI			.0071	0	0	0
V			0	0	0	0
ZN	<.005		0	0	0	0

WATER QUALITY VALUES FOR TENDERFOOT
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	APR02/81 TENDER-FT CREEK	APR09/81 TENDER-FT CREEK	NOV03/80 CHEAK. RIVER
ALK.TOT	20-300		25.7	25.3	17.9
AMMON.	<.002	>.08	0	0	.005
CO2	2-5	>20			
CHLOR.	<170	>400	1.94	1.82	1.84
COLOR	<15				10
COND.FLD	150-2000		45	48	31
COND.LAB	**		75.5	4.29	54
DO-PPM	>6-8	<4	11.5	11.5	11.6
DO-%SAT	100%		93.3	93.3	96.7
DGAS.TOT	<103%	>110%	101.4	101.3	102.9
DGAS.NIT	100%		103.6	103.4	104.5
HARDNESS	20-400		26.6	25.9	22.7
H2S	<.002	>.004			
NITRITE	<.012	.2	0	0	0
NITRATE	<.12		.0583	.051	.0464
PH-FLD	6.8-8.5	<5,>9	6.6	7.3	6.7
PH-LAB	**	**	7.1	7.2	7.5
PHOSPH.	<.05		.0057	.0065	.014
RESID.TOT	<2000				
RESID.FIL	70-400		60	59	47
RESID.N.F	<3		0	0	12
SALIN.					0
SILICA	<10-60		5.24	4.29	3.31
SULFATE	<90		7.7	7.8	1.84
TASTE	OK				
T.D.SOL	500-1000	15000			
TEMP.	4-18C	<2,>25	6.9	6.9	7.7
TURBID	1-60	>1000	0	0	5.5
METALS--					
AL	<.1	>5	0	0	.308
AS	<.5	>1	0	0	0
BA	<1		.005	.0052	.012
CA	4-150	>300	9.6	9.28	7.77
CD	<.0004		0	0	0
CO			0	0	0
CR	<.01		0	0	0
CU	<.006		0	0	0
FE	<.3		.0078	.0255	.163
HG	<.00005	>.0002	0	0	0
K		>50	.755	.753	.524
MG	<10	>100	.63	.66	.806
MN	<.05	>15	0	0	.0066
MO			0	0	0
NA		>500	2.3	2.35	2
NI			0	0	0
P			0	0	0
PB	<.01		0	0	0
SB			0	0	0
SE		>2.5	0	0	0
SI	<10-60		5.43	5.03	4.16
SN			0	0	0
SR			.065	.0638	.0615
TI			0	0	.0096
V			0	0	0
ZN	<.005		0	0	0

WATER QUALITY VALUES FOR TENDERFOOT
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	NOV01/80 1.5 HR WELL #1	NOV01/80 18 HR WELL #1	NOV03/80 43 HR WELL #1	NOV04/80 67 HR WELL #1	NOV04/80 1.5 HR WELL #2	NOV05/80 24.5 HR WELL #2	NOV06/80 43 HR WELL #2
ALK.TOT	20-300		35.3	35.7	35.3	34.6	42	42.7	42
AMMON.	<.002	>.08	.0105	.0125	0	0	0	0	0
CO2	2-5	>20							
CHLOR.	<170	>400	2.72	2.75	2.57	2.5	3.66	3.34	3.43
COLOR	<15				5				
COND.FLD	150-2000		61	59	61	60	77	71	73
COND.LAB	**		101.7	102	98	96.3	124	120	118
DO-PPM	>6-8	<4	8.8	9	8.9	9.1	9.3	9.3	9.2
DO-%SAT	100%		72.3	74	73.1	74.8	76.6	76.6	75.8
DGAS.TOT	<103%	>110%	101	101.2	101.7	101.6	102.3	104.3	104
DGAS.NIT	100%		108.6	108.4	109.3	108.7	109.1	118.8	111.5
HARDNESS	20-400		43.7	44.3	40.3	40	52	53	51.9
H2S	<.002	>.004							
NITRITE	<.012	.2	0	0	0	0	0	0	0
NITRATE	<.12		.101	.0905	.125	.112	.0809	.0745	.0795
PH-FLD	6.8-8.5	<5,>9	6.2	6.4	6.45	6.45	6.7	6.5	6.5
PH-LAB	**	**	7.5	7.6	7.3	7.5	7.7	7.6	7.5
PHOSPH.	<.05		.0065	.0077	.0077	.0076	.0061	0	.005
RESID.TOT	<2000								
RESID.FIL	70-400		70	69	74	76	85	80	79
RESID.N.F	<3		0	0	0	0	0	0	0
SALIN.					0				
SILICA	<10-60		6.12	6.13	6.2	5.98	4.73	6.07	6.23
SULFATE	<90		9.3	9.25	9.4	9.85	12.2	11.4	11.1
TASTE	OK								
T.D.SOL	500-1000	15000							
TEMP.	4-18C	<2,>25	7.1	7.1	7.1	7.1	7.4	7.2	7.2
TURBID	1-60	>1000	0	0	0	0	0	0	0
METALS--									
AL	<.1	>5	0	0	0	0	0	0	0
AS	<.5	>1	0	0	0	0	0	0	0
BA	<1		.0032	.0038	0	.0034	.0075	.0068	.0071
CA	4-150	>300	15.8	16	14.4	12.8	17.6	19.6	19.2
CD	<.0004		0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0
CU	<.006		0	0	0	0	0	0	0
FE	<.3		.012	.035	0	0	.027	0	0
HG	<.00005	>.0002	0	0	0	0	0	0	0
K		>50	.96	1	.933	.94	.891	.877	.915
MG	<10	>100	1.04	1.05	1.05	1.95	1.96	.978	.967
MN	<.05	>15	0	.0074	0	0	.0095	0	0
MO			0	0	0	0	0	0	0
NA		>500	2.58	2.58	2.6	1.95	3.24	2.96	3.13
NI			0	0	0	0	0	0	0
P			0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0
SI	<10-60		7.27	7.39	7.36	7.33	5.87	5.86	6.24
SN			0	0	0	0	0	.32	0
SR			.0744	.0754	.0754	.0756	.0915	.0828	.0832
TI			0	0	0	0	0	0	0
V			0	0	0	0	0	0	0
ZN	<.005		0	0	0	0	0	0	0

WATER QUALITY VALUES FOR TENDERFOOT
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	APR07/81 7 HR WELL #3	APR08/81 24.5 HR WELL #3	APR09/81 48.5 HR WELL #3	APR01/81 2 HR WELL #4	APR02/81 23.5 HR WELL #4	APR02/81 24 HR WELL #4	APR03/81 48.3 HR WELL #4
ALK.TOT	20-300		30.7	30	30.7	31.5	29.5	25.7	29.7
AMMON.	<.002	>.08	0	0	0	0	0	0	0
CO2	2-5	>20							
CHLOR.	<170	>400	1.88	1.85	1.81	2.19	1.99	1.94	2.1
COLOR	<15								
COND.FLD	150-2000		49	50	50	55	50	45	50
COND.LAB	"		86.2	86.2	84.5	89.5	84.5	75.5	84.5
DO-PPM	>6-8	<4	9.3	9.4	9.4	9	9.2	11.5	9.2
DO-%SAT	100%		75.4	76.5	76.1	72.6	74.5	93.3	74.4
DGAS.TOT	<103%	>110%	101.4	101.3	101.7	104.9	102.9	101.4	102.4
DGAS.NIT	100%		108.3	107.9	108.5	113.5	110.4	103.6	109.8
HARDNESS	20-400		32.7	29.1	34.8	36.6	34.3	26.6	30.2
H2S	<.002	>.004							
NITRITE	<.012	.2	0	0	0	0	0	0	0
NITRATE	<.12		.083	.08	.08	.0747	.0768	.0583	.073
PH-FLD	6.8-8.5	<5,>9	7	7.1	7.1	7.1	7	6.6	7
PH-LAB	"	"	7.1	7.1	7.1	7.2	7.1	7.1	7.6
PHOSPH.	<.05		.0062	.006	.0062	.0056	.0051	.0057	.005
RESID.TOT	<2000								
RESID.FIL	70-400		64	76	64	66	66	60	63
RESID.N.F	<3		0	0	0	0	0	0	0
SALIN.									
SILICA	<10-60		5.12	5.11	5.14	6.18	6.08	5.24	5.99
SULFATE	<90		7.5	7.6	8	2.19	7.7	7.7	8.8
TASTE	OK								
T.D.SOL	500-1000	15000							
TEMP.	4-18C	<2,>25	7	6.8	6.8	6.8	6.8	6.9	6.8
TURBID	1-60	>1000	0	0	0	0	0	0	0
METALS---									
AL	<.1	>5	0	0	.051	0	0	0	.074
AS	<.5	>1	0	0	0	0	0	0	0
BA	<1		.0036	.0034	.0034	.0038	.0038	.005	.004
CA	4-150	>300	11.7	10.3	12.5	13.3	12.5	9.6	10.6
CD	<.0004		0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0
CU	<.006		0	0	0	.0024	0	0	0
FE	<.3		.0235	.0129	.0128	.0117	.0061	.0078	.0151
HG	<.00005	>.0002	0	0	0	0	0	0	0
K		>50	.891	.881	.861	.866	.859	.755	.897
MG	<10	>100	.85	.83	.87	.81	.75	.63	.91
MN	<.05	>15	.0012	0	0	0	0	0	0
MO			0	0	0	0	0	0	0
NA		>500	2.51	2.57	2.53	2.45	2.4	2.1	2.53
NI			0	0	0	0	0	0	0
P			0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0
SI	<10-60		6.18	6.16	6.22	6.34	6.26	5.43	6.48
SN			0	0	0	0	0	0	0
SR			.0679	.0681	.0675	.0704	.0673	.065	.065
TI			0	0	0	0	0	0	0
V			0	0	0	0	0	0	0
ZN	<.005		0	0	0	0	0	0	.0054

WATER QUALITY VALUES FOR TETE JAUNE CACHE
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	SEPT 2/79 TETE JAUNE CACHE
ALK.TOT	20-300		54.9
ARSEN.	<.002	>.08	.005
CO2	2-5	>20	
CHLOR.	<170	>400	.5
COLOR	<15		
COND.FLD	150-2000		
COND.LAB	**		129
DO-PPM	>6-8	<4	
DO-%SAT	100%		
DGAS.TOT	<103%	>110%	
DGAS.HIT	100%		
HARDNESS	20-400		
H2S	<.002	>.004	
NITRITE	<.012	.2	.005
NITRATE	<.12		.056
PH-FLD	6.8-8.5	<5,>9	
PH-LAB	**	**	8
PHOSPH.	<.05		.0083
RESID.TOT	<2000		
RESID.FIL	70-400		74
RESID.N.F	<3		15
SALIN.			
SILICA	<10-60		.85
SULFATE	<90		10
TASTE	OK		
T.D.SOL	500-1000	15000	
TEMP.	4-18C	<2,>25	8.4
TURBID	1-60	>1000	14
METALS--			
AL	<.1	>5	.29
AS	<.5	>1	.15
BA	<1		.0132
CA	4-150	>300	.001
CD	<.0004		.01
CO			.01
CR	<.01		.015
CU	<.006		.001
FE	<.3		.226
HG	<.00005	>.0002	.002
K		>50	.199
MG	<10	>100	4.39
MN	<.05	>15	.0103
MO			.15
NA		>500	
NI			.08
P			.3
PB	<.01		.001
SB			.08
SE		>2.5	.15
SI	<10-60		1.34
SN			.2
SR			.133
TI			.009
V			.05
ZN	<.005		.001

WATER QUALITY VALUES FOR TOM BROWNE
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JAN19/81 (P.O.S.) T BROWNE	MAY14/81 T BROWNE LAKE	JUL11/81 STN 1, 2M T BROWNE	JUL11/81 STN1, 10M T BROWNE	JUL11/81 STN 2, 2M T BROWNE	JUL11/81 STN2, 10M T BROWNE	AUG20/81 SURFACE T BROWNE	AUG20/81 SURFACE T BROWNE	AUG20/81 2 M T BROWNE	AUG20/81 10 M T BROWNE
ALK.TOT	20-300		4.2	3.92	4.88	4.39	4.88	4.55	5.07	5.26	5.07	4.58
AMMON.	<.002	>.08	0	.0057	0	0	.006	.0059	.005	0	0	.0065
CO2	2-5	>20										
CHLOR.	<170	>400	.69	1.01	1.47	1.47	1.27	1.6	.78	.75	.82	.91
COLOR	<15		50									
COND.FLD	150-2000											
COND.LAB	""		15.5	17.9	14.7	15.5	14.7	15.7				
DO-PPM	>6-8	<4										
DO-%SAT	100%											
DGAS.TOT	<103%	>110%										
DGAS.NIT	100%											
HARDNESS	20-400		5.66		4.02	3.92	4.01	4.06	4.5	4.55	4.63	4.36
H2S	<.002	>.004										
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.089	.058	.0234	.0695	.0253	.0802	0	0	0	.077
PH-FLD	6.8-8.5	<5,>9			6	6	6	6	6	6.5	6	6
PH-LAB	""	""	6.4	6.4	6.7	6.4	6.6	6.4	6.7	6.9	6.7	6.4
PHOSPH.	<.05		.0057	.0053	.0052	.005	.0057	.005				
RESID.TOT	<2000											
RESID.FIL	70-400		25	26	22.5	24	23.5	25				
RESID.V.F	<3		0	0	0	0	0	0	0	0	0	0
SALIN.												
SILICA	<10-60		1.97	1.76	1.62	1.8	1.62	1.83	1.66	1.66	1.65	1.82
SULFATE	<90		1.8	1.5	1.3	1.3	0	0				
TASTE	OK											
T.D.SOL	500-1000	15000										
TEMP.	4-18C	<2,>25		12-13	14.7	7	17	8	17.5	19	17.5	5.3
TURBID	1-60	>1000	2.5	0	0	0	0	0				
METALS--												
AL	<.1	>5	.236	.209	.191	.193	.205	.188	.176	.166	.191	.184
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0
BA	<1		.0046	.0033	.0036	.0035	.0034	.0035	.0037	.0036	.0036	.0037
CA	4-150	>300	1.76	1.26	1.23	1.19	1.21	1.23	1.39	1.41	1.41	1.35
CD	<.0004		0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	.0099	0	.0081	0	0	0	0	0
CU	<.006		0	.0018	.0012	0	0	0	0	0	0	0
FE	<.3		.234	.176	.147	.105	.109	.147	.0973	.0962	.0976	.147
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0
K		>50	.279	.254	.266	.237	.244	.259				
MG	<10	>100	.307	.23	.23	.23	.24	.24	.25	.25	.27	.24
MN	<.05	>15	.0092	0	.0037	.0013	.0011	.0025	.0018	.0019	.0018	.0033
MO			0	0	0	0	0	0	0	0	0	0
NA		>500	.98	.86	.81	.77	.79	.81	.91	.88	.91	.89
NI			0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	.0012	0	.001	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0
SI	<10-60		1.6	1.69	1.67	1.53	1.5	1.67	1.6	1.59	1.61	1.8
SN			0	0	0	0	0	0	0	0	0	0
SR			.0095	.0087	.0083	.0078	.0079	.0078	.0099	.0099	.0097	.0088
TI			0	.0256	.0084	.0088	.0086	.009	.009	.0092	.009	.0093
V			0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	.0013	.0037	.0015	.0023	.0057	0	0	0	0

WATER QUALITY VALUES FOR TOM BROWNE
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	NOV12/81 SURFACE T BROWNE	NOV12/81 SURFACE T BROWNE	NOV12/81 2 M T BROWNE	NOV12/81 10 M T BROWNE	FEB03/82 0 M T BROWNE	FEB03/82 0 M T BROWNE	FEB03/82 2 M T BROWNE	FEB03/82 10 M T BROWNE	FEB22/82 0 M T BROWNE	FEB22/82 2 M T BROWNE	FEB22/82 10 M T BROWNE
ALK.TOT	20-300		3.68	4.4	3.68	3.92					4	4	4
AMMON.	<.002	>.08	.0064	.007	.0063	.009	.007	.011	0	0	.006	.005	.005
CO2	2-5	>20											
CHLOR.	<170	>400	.97	1.19	1.36	1.04	3.1	1.5	1.3	1.4	1.43	1.42	1.57
COLOR	<15												
COND.FLD	150-2000												
COND.LAB	**		14.6	14.5	14.9	15					14.2	14.2	14.3
DO-PPM	>6-8	<4											
DO-%SAT	100%												
DGAS.TOT	<103%	>110%											
DGAS.HIT	100%												
HARDNESS	20-400		3.98	4.27	4.12	2.6	3.92	4.17	4.03	3.97	5.46	5.35	5.23
H2S	<.002	>.004											
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.076	.073	.087	.145	.22	.69	.1	.1	.09	.09	.09
PH-FLD	6.8-8.5	<5,>9	7	7-7.5	7	7	7-7.5	7-7.5	7	7-7.5	6.5-7		
PH-LAB	**	**	6.4	6.5	6.3	6.3	6.4	5.6	6.4	6.4	5.6	5.6	5.6
PHOSPH.	<.05		0	0	0	0					.005	.005	.005
RESID.TOT	<2000												
RESID.FIL	70-400		30	27	29	29					28	28	28
RESID.N.F	<3		0	0	0	0					0	0	0
SALIN.													
SILICA	<10-60		1.83	1.37	1.75	1.77	1.8	1.8	1.7	1.7	1.6	1.6	1.5
SULFATE	<90		3.45	3.5	3.4	3.75	2	1.2	1.9	0	3.6	3.7	3.3
TASTE	OK												
T.D.SOL	500-1000	15000											
TEMP.	4-18C	<2,>25	9.5	9.6	9	9	2.5	2.2	2	2	1		
TURBID	1-60	>1000	0	0	1.1	0					.1	.2	0
METALS--													
AL	<.1	>5	.205	.243	.227	.15	.205	.209	.202	.202	.21	.19	.19
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0
BA	<1		.0039	.0046	.0045	.0022	.0035	.0036	.0035	.0035	.003	.003	.003
CA	4-150	>300	1.23	1.33	1.27	.762	1.24	1.29	1.25	1.26	1.2	1.2	1.1
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0	0
CU	<.006		0	.0018	0	.0012	0	.001	0	0	0	0	0
FE	<.3		.124	.178	.124	.0774	.228	.226	.23	.226	.201	.197	.203
HG	<.00005	>.0002	0	0	0	0	0	0	0	0	0	0	0
K		>50									.23	.23	.23
MG	<10	>100	.22	.23	.23	.17	.2	.23	.22	.2	.2	.2	.2
MN	<.05	>15	.0053	.0068	.0053	.0032	.0101	.0107	.0101	.0105	.011	.007	.008
MO			0	0	0	0	0	0	0	0	0	0	0
NA		>500	.75	.82	.8	0	.8	.88	.8	.8	.8	.8	.8
NI			0	0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60		1.62	1.67	1.69	.98	1.66	1.66	1.63	1.67	1.7	1.7	1.7
SN			0	0	0	0	0	0	0	0	0	0	0
SR			.0087	.0094	.0094	.0047	.0092	.0098	.0089	.0095	.008	.008	.008
TI			0	0	0	0	0	0	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0	0
ZN	<.005		0	.0039	.0027	.0023	.002	.0068	.002	.002	0	.005	0

WATER QUALITY VALUES FOR TOM BROWNE
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JAN19/81 GLENDALE RIVER	SEP08/81 GLENDALE RIVER
ALK.TOT	20-300		3.98	7.24
AMMON.	<.002	>.08	.005	.0597
CO2	2-5	>20		
CHLOR.	<170	>400	0	.67
COLOR	<15		30	
COND.FLD	150-2000			
COND.LAB	**		12.1	20.7
DO-PPM	>6-8	<4		
DO-%SAT	100%			
DGAS.TOT	<103%	>110%		
DGAS.NIT	100%			
HARDNESS	20-400		5.45	6.42
H2S	<.002	>.004		
NITRITE	<.012	.2	0	0
NITRATE	<.12		.063	.111
PH-FLD	6.8-8.5	<5,>9		
PH-LAB	**	**	6.4	6.7
PHOSPH.	<.05		.0056	.0066
RESID.TOT	<2000			
RESID.FIL	70-400		22	25
RESID.N.F	<3		0	0
SALIN.				
SILICA	<10-60		1.5	2.21
SULFATE	<90		1.5	2.3
TASTE	OK			
T.D.SOL	500-1000	15000		
TEMP.	4-18C	<2,>25		
TURBID	1-60	>1000	1.3	0
METALS---				
AL	<.1	>5	.192	.12
AS	<.5	>1	0	0
BA	<1		.0035	.0041
CA	4-150	>300	1.83	2.11
CD	<.0004		0	0
CO			0	0
CR	<.01		0	0
CU	<.006		0	0
FE	<.3		.102	.154
HG	<.00005	>.0002	0	0
K		>50	.163	.293
MG	<10	>100	.213	.28
MN	<.05	>15	.004	.0075
MO			0	0
NA		>500	.668	1.1
NI			0	0
P			0	0
PB	<.01		0	0
SB			0	0
SE		>2.5	0	0
SI	<10-60		1.21	2.07
SN			0	0
SR			.0077	.0108
TI			0	.0098
V			0	0
ZN	<.005		.008	.0012

WATER QUALITY VALUES FOR TORPY
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	APR13/81 TORPY RIVER	APR24/81 TORPY RIVER	MAY11/81 TORPY RIVER	MAY28/81 TORPY RIVER	JUN22/81 TORPY RIVER	SEP09/81 TORPY RIVER	OCT12/81 TORPY RIVER
ALK.TOT	20-300		83.8	68	56.9	50	52	82.3	78.7
AMMON.	<.002	>.08	.014	.022	.018	.0094	0	.0062	0
CO2	2-5	>20							
CHLOR.	<170	>600	.9	3.02	1.06	.51	0	.65	0
COLOR	<15								
COND.FLD	150-2000								
COND.LAB	"		180	143	123	104	107	173	168
DO-PPM	>6-8	<4	12		12		10	10	14
DO-%SAT	100%								
DGAS.TOT	<103%	>110%							
DGAS.NIT	100%								
HARDNESS	20-400							86.5	83.3
H2S	<.002	>.004							
NITRITE	<.012	.2	0	0	.005	0	0	0	0
NITRATE	<.12		.124	.263	.199	.102	.05	.12	.055
PH-FLD	6.8-8.5	<5,>9	7.75		7.5		7.0	8	8
PH-LAB	"	"	8	8.1	8	8.8	8.1	8.1	8.2
PHOSPH.	<.05		.0343	.55	.0945	.0386	.0184	.0079	.0077
RESID.TOT	<2000								
RESID.FIL	70-400		109	88	76	60	59	99	107
RESID.N.F	<3		29	960	128	77	55	0	0
SALIN.									
SILICA	<10-60		2.16	1.77	1.64	1.35	1.52	1.65	1.72
SULFATE	<90		5.1	4.2	3.65	2.9	3.1	6.1	6.25
TASTE	OK								
T.D.SOL	500-1000	15000							
TEMP.	4-18C	<2,>25	1		5		10	13	4.5
TURBID	1-50	>1000	12	65	50	17	12	3.2	5.4
METALS--									
AL	<.1	>5	.226	.89	.861	.481	.275	.114	.171
AS	<.5	>1	0	0	0	0	0	0	0
BA	<1		.071	.0346	.0231	.0162	.0132	.0142	.0131
CA	4-150	>300	28.58	26.7	21	16.6	16.4	27.4	26.4
CD	<.0004		0	0	0	0	0	0	0
CO			0	.0097	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0
CU	<.006		.0018	.0067	.0025	.0024	.0014	0	0
FE	<.3		.718	3.01	1.58	.418	.275	.226	.285
HG	<.00005	>.0002	0	0	0	0	0	0	0
K		>50	.304	.501	.255	.281	.204	.18	.283
MG	<10	>100	4.53	2.27	3.58	2.41	2.62	4.4	4.21
MN	<.05	>15	.0503	.11	.0693	.0338	.0285	.0208	.0177
MO			0	0	0	0	0	0	0
NA		>500	.99	.71	.62	.59	.51	1.02	1.03
NI			0	0	0	0	0	0	0
P			0	0	0	0	0	0	0
PB	<.01		.001	.0014	.0012	.001	0	0	0
SB			0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0
SI	<10-60		3.33	4.97	2.9	2.44	1.18	1.78	2.11
SN			0	0	0	0	0	0	0
SR			.121	.0882	.0991	.0775	.0804	.13	.124
TI			.0054	.0188	.0179	.0438	.016	.0112	.0153
V			0	0	0	0	0	0	0
ZN	<.005		.0018	.0078	.0043	.0065	.003	.0015	.0013

WATER QUALITY VALUES FOR TRINITY
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	JUL25/82 TRINITY CREEK	AUG22/82 TRINITY CREEK	SEP12/82 TRINITY CREEK	OCT15/82 TRINITY CREEK
ALK.TOT	20-300		113	136	134	140
AMMON.	<.002	>.08	0	0	0	.005
CO2	2-5	>20				
CHLOR.	<170	>400	.5	1	1	.8
COLOR	<15					
COND.FLD	150-2000					
COND.LAB	**		244	281	282	287
DO-PPM	>6-8	<4				
DO-%SAT	100%					
DGAS.TOT	<103%	>110%				
DGAS.NIT	100%					
HARDNESS	20-400		124	140	143	146
H2S	<.002	>.004				
NITRITE	<.012	.2	.006	0	0	0
NITRATE	<.12		.02	0	.01	.01
PH-FLD	6.8-8.5	<5,>9				
PH-LAB	**	**		8.3	8.2	8.1
PHOSPH.	<.05		.013	.013	.008	.007
RESID.TOT	<2000					
RESID.FIL	70-400		165	181	184	186
RESID.N.F	<3		17	7	5	8
SALIN.						
SILICA	<10-60		6.9	7.4	7.2	2.9
SULFATE	<90		13.4	15.5	14.2	16
TASTE	OK					
T.D.SOL	500-1000	15000				
TEMP.	4-18C	<2,>25				
TURBID	1-60	>1000	.8	.1	.1	0
METALS--						
AL	<.1	>5	.08	0	0	0
AS	<.5	>1	0	0	0	0
BA	<1		.024	.024	.025	.023
CA	4-150	>300	39.1	45	456.6	47
CD	<.0004		0	0	0	0
CO			0	0	0	0
CR	<.01		0	0	0	0
CU	<.006		0	0	0	0
FE	<.3		.105	.041	.042	.022
HG	<.00005	>.0002	0	0	0	0
K		>50		1.65	1.81	1.67
MG	<10	>100	6.3	6.7	6.9	6.9
MN	<.05	>15	.012	.009	.008	.006
MO			0	0	0	0
NA		>500	2.9	2.5	3.3	3.1
NI			0	0	0	0
P			0	0	0	0
PB	<.01		0	0	0	0
SB			0	0	0	0
SE		>2.5	0	0	0	0
SI	<10-60		7.4	6.9	6.9	.022
SN			0	0	0	.01
SR			.233	.264	.258	.263
TI			0	0	0	0
V			0	0	0	0
ZN	<.005		0	0	0	0

WATER QUALITY VALUES FOR WHITEHORSE
(BELOW DETECTION LEVEL=0)

PARAM.	RECOMM.	TOXIC	JUN24/81 WELL 1 AND 4	JUN24/81 WELL 6	JUN24/81 SURFACE
ALK.TOT	20-300		102	92.6	42.4
AMMON.	<.002	>.08	0	0	0
CO2	2-5	>20			
CHLOR.	<170	>400	1.02	.99	0
COLOR	<15				
COND.FLD	150-2000		158	130	65
COND.LAB	**		270	230	98.5
DO-PPM	>6-8	<4	2	5.5	11.4
DO-%SAT	100%		16.5	45.6	112.6
DGAS.TOT	<103%	>110%	96.1	101.8	102.6
DGAS.NIT	100%		117.2	116.7	100
HARDNESS	20-400		115	101	43.5
H2S	<.002	>.004			
NITRITE	<.012	.2	0	0	0
NITRATE	<.12		.046	.07	0
PH-FLD	6.8-8.5	<5,>9	8	7.9	7.9
PH-LAB	**	**	8.2	8.2	8
PHOSPH.	<.05		.0153	.0092	0
RESID.TOT	<2000				
RESID.FIL	70-400		158	131	66
RESID.N.F	<3		0	0	0
SALIN.					
SILICA	<10-60		5.56	4.73	1.51
SULFATE	<90		31.3	20.1	6.3
TASTE	OK				
T.D.SOL	500-1000	15000			
TEMP.	4-18C	<2,>25	4.9	5.1	12.4
TURBID	1-60	>1000	0	0	0
METALS--					
AL	<.1	>5	0	0	.057
AS	<.5	>1	0	0	0
BA	<1		.0175	.0201	.026
CA	4-150	>300	20.6	19.9	13.4
CD	<.0004		0	0	0
CO			0	0	0
CR	<.01		0	0	0
CU	<.006		.0011	0	.0032
FE	<.3		.0078	.0237	.0759
HG	<.00005	>.0002	0	0	0
K		>50	1.53	1.22	.617
MG	<10	>100	15.4	12.4	2.44
MN	<.05	>15	0	0	.0037
MO			0	0	0
NA		>500	8.48	5.91	1.11
NI			0	0	0
P			0	0	0
PB	<.01		0	0	0
SB			0	0	0
SE		>2.5	0	0	0
SI	<10-60		5.56	4.71	1.51
SN			0	0	0
SR			.175	.151	.0726
TI			0	0	0
V			0	0	0
ZN	<.005		0	0	.0016

WATER QUALITY VALUES FOR WILLOW
(BELOW DETECTION LIMITS=0)

PARAM.	RECOMM.	TOXIC	APR14/81 PEN REAR SITE	MAY21/81 PEN REAR SITE	JUN23/81 PEN REAR SITE	JUL15/81 PEN REAR SITE	AUG26/81 PEN REAR SITE	SEP28/81 PEN REAR SITE	JUN26/81 RIVER @ 7 KM	JUL15/81 RIVER @ 7 KM	AUG26/81 RIVER @ 7 KM	SEP28/81 RIVER @ 7 KM	AUG26/81 GRDWATER SOURCE	SEP28/81 GRDWATER SOURCE
ALK.TOT	20-300		35.5	27.9	34.9	35.2	38.6	33.9	26.4	31.7	34	30	69	64
AMMON.	<.002	>.08	.0155	0	0	0	0	0	0	0	0	0	0	0
CO2	2-5	>20												
CHLOR.	<170	>400	1.62	.7	1.16	.63	.7	.55	0	0	0	.49	.91	.97
COLOR	<15		0	35	30	40	30		50	30	30		5	
COND.FLD	150-2000													
COND.LAB	"		86	61	79	78	84	73	63	72.5	76.5	68	143	135.7
DO-PPM	>6-8	<4	11	11.2	10	9.75	10	10	10.2	9.8	10	11	0	0
DO-%SAT	100%													
DGAS.TOT	<103%	>110%												
DGAS.NIT	100%													
HARDNESS	20-400		40	34.1	38.1	38.8	40	34.8	32	34.4	40	34	72	69
H2S	<.002	>.004												
NITRITE	<.012	.2	0	0	0	0	0	0	0	0	0	0	0	0
NITRATE	<.12		.165	.0163	0	0	.0395	.0206	0	0	0	0	.0254	0
PH-FLD	6.8-8.5	<5,>9	7.45	7.59	7.95	7.93	7.75	7.5	7.8	7.91	8	8	7	7.5
PH-LAB	"	"	7.5	7.5	7.5	7.6	7.6	7.6	7.4	7.5	7.5	7.6	7.1	7.6
PHOSPH.	<.05		.144	.0267	.0209	.0112	.0188	.0148	.027	.01	.0098	.0233	0	.011
RESID.TOT	<2000													
RESID.FIL	70-400		68	62	63	68	71	65	62	65	64	98	99	98
RESID.N.F	<3		117	25	22	19	9	14	30	0	0	0	0	0
SALIN.			0	0	0	0	0	0	0	0	0	0	0	0
SILICA	<10-60		3.74	3.06	2.15	3.34	3.66	3.1	1.93	3.19	3.37	2.94	4.63	4.13
SULPATE	<90		6.5	4.35	4.45	3.8	4.1	4.1	5.15	4	4	3.7	3.35	3.5
TASTE	OK													
T.D.SOL	500-1000	15000												
TEMP.	4-18C	<2,>25	.5	8.5	16	14	13	10	13	14	13	10	9	9.5
TURBID	1-60	>1000	58	18	6.6	8.8	8.5	8.6	16	2.4	2.3	2	0	8.5
METALS--														
AL	<.1	>5	.931	.227	.229	.258	.211	.194	.296	.092	.107	.107	0	0
AS	<.5	>1	0	0	0	0	0	0	0	0	0	0	0	0
BA	<1		.0392	.0179	.0221	.0451	.0195	.0185	.0312	.0389	.0166	.016	.0255	.0243
CA	4-150	>300	11.2	10.3	11.3	11.3	11.4	9.6	9.49	10.3	12.1	9.6	21.8	21
CD	<.0004		0	0	0	0	0	0	0	0	0	0	0	0
CO			0	0	0	0	0	0	0	0	0	0	0	0
CR	<.01		0	0	0	0	0	0	0	0	0	0	0	0
CU	<.006		.0051	.002	.0022	.0012	.0011	.0013	.0018	0	0	.0012	.0011	.002
FE	<.3		1.91	.558	.404	.483	.547	.486	.619	.294	.336	.327	.013	.017
HG	<.00005	>.0002	0	0	0	.00026	0	0	0	.00033	0	0	0	0
K		>50	.899	.273	.342	.279	.295	.269	.241	.214	.22	.217	.369	.374
MG	<10	>100	2.92	2.03	2.41	2.44	2.79	2.63	2.02	2.12	2.37	2.44	4.27	4.02
MN	<.05	>15	.167	.0361	.034	.033	.0378	.0318	.0428	.0193	.019	.0232	.0044	.0068
MO			0	0	0	0	0	0	0	0	0	0	0	0
NA		>500	1.29	.789	.949	1.04	1.04	1.14	.785	.96	.865	1.21	1.72	1.78
NI			0	0	0	0	0	0	0	0	0	0	0	0
P			0	0	0	0	0	0	0	0	0	0	0	0
PB	<.01		0	0	0	0	0	0	0	0	0	0	0	0
SB			0	0	0	0	0	0	0	0	0	0	0	0
SE		>2.5	0	0	0	0	0	0	0	0	0	0	0	0
SI	<10-60		4.71	3.15	3.54	3.78	3.87	3.77	3.54	3.18	3.56	3.42	4.86	4.72
SN			0	0	0	0	0	0	0	0	0	0	0	0
SR			.0579	.039	.0496	.0522	.535	.498	.0403	.048	.0491	.0443	.0977	.0928
TI			.025	.0085	.0123	.0127	0	.0099	.0098	0	0	0	0	0
V			0	0	0	0	0	0	0	0	0	0	0	0
ZN	<.005		.0049	.0033	.0065	.0021	0	.025	.0024	0	0	.0084	0	.011

WATER TEMPERATURE DATA

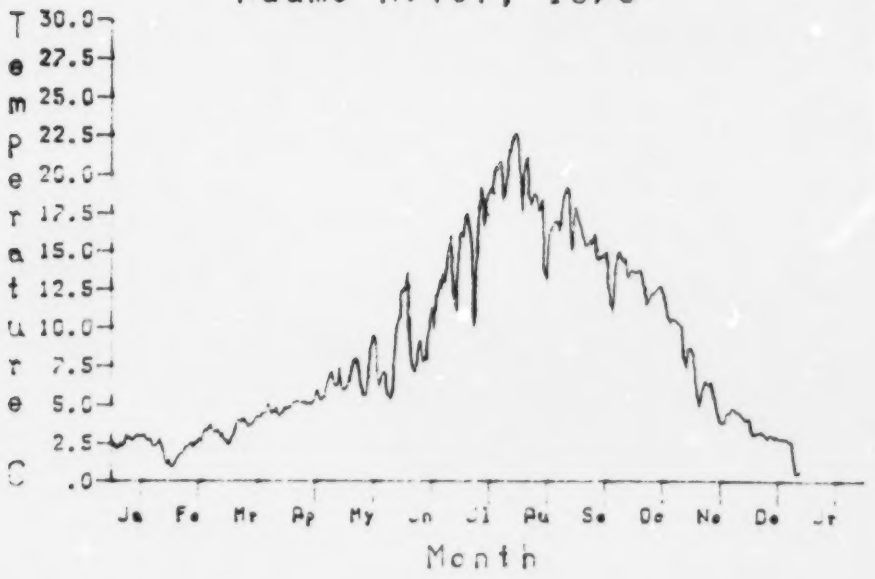
Water temperature data are presented in two forms: as graphs of daily temperature recorded over a year and as tables of monthly minima, maxima and means for each year monitored. The graphs and tables are presented in alphabetical order by title, as per the list of sample locations which starts on page 7. The graph(s) for each location are presented first, then the table(s) corresponding to that location, then the graph for the next location. Sometimes two graphs or tables from different locations are shown on one page, to save space.

The graphs are all on the same scale: 0°C to 30°C vertically and one full year horizontally. The graphs are printouts of the daily mean temperatures from a computer file which stores the minimum, maximum and mean for 365 days per year. The middle of each month is labelled with a tic mark.

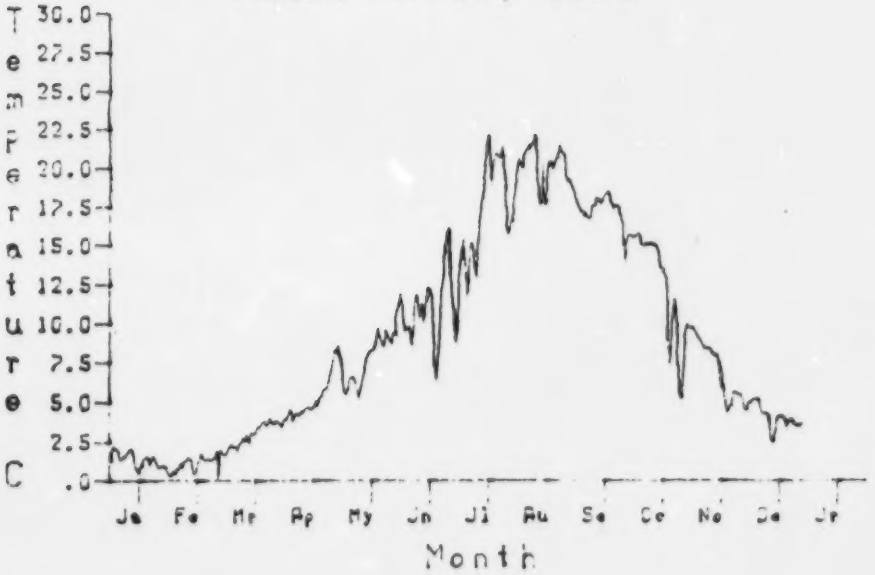
The tables show the minimum, maximum and mean temperature in degrees Centigrade for the data from each month on record, as well as the number of days in that month which have data entries. If a month does not have a complete record the mean will not represent the mean temperature for the month but only the mean of the days for which there are data. The number of days on record usually allows one to determine when non-continuous recording periods started and ended. For example if the "# of days" for September to December are shown as 30, 2, 17 and 31, records exist for all of September, the first two days of October, the last 17 days of November and all of December. This example is from the Upper Springs at Bowron, 1980.

To find water temperature data for a particular site, first look up the site in the list of locations (it may be included in a different site name), then look in Table 2 to see if water temperature data have been collected for that site and if so, over what period of the year. Then look in the block of temperature data for the graph(s) and table(s) for that site.

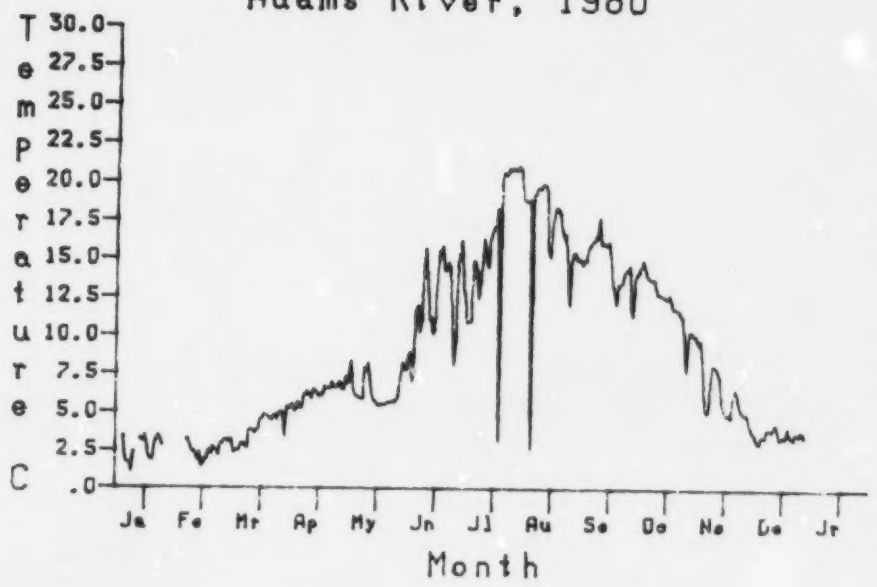
Adams River, 1978



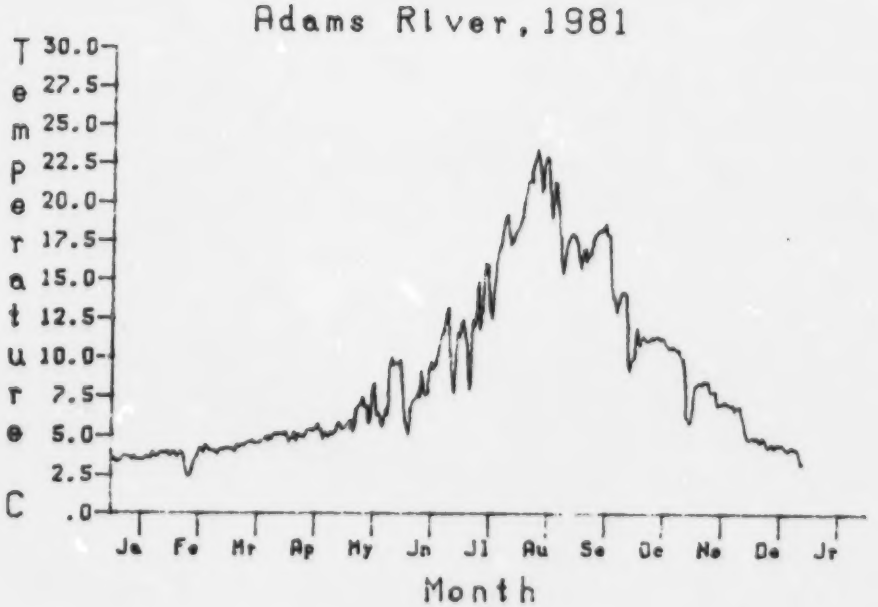
Adams River, 1979



Adams River, 1980



Adams River, 1981



ADAMS RIVER 1978

MONTH	MIN.C	MAX. C	MEAN. C	# OF DAYS
JANUARY	.56	3.33	2.47	31
FEBRUARY	.56	4.44	2.54	28
MARCH	1.39	6.39	3.93	31
APRIL	3.33	8.06	5.5	30
MAY	5	11.39	7.04	31
JUNE	6.11	17.5	11.11	30
JULY	6.67	22.78	17.35	31
AUGUST	9.44	23.61	18.45	31
SEPTEMBER	8.61	18.61	14.86	24
OCTOBER	7.22	14.17	11.99	31
NOVEMBER	3.33	9.17	5.63	30
DECEMBER	.28	4.14	2.81	31

ADAMS RIVER 1979

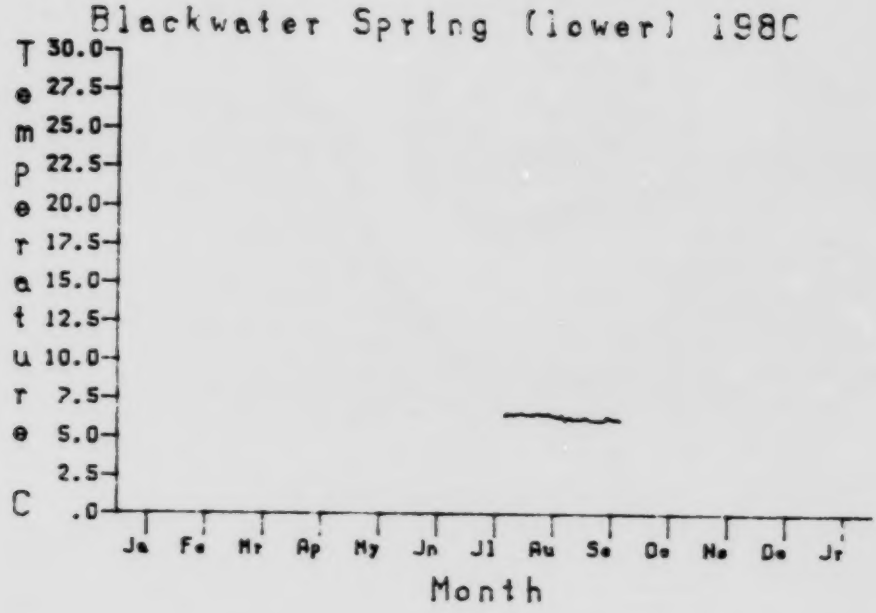
MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	0	2.5	1.33	31
FEBRUARY	0	3.06	1.1	28
MARCH	.56	5.28	2.89	31
APRIL	2.78	9.72	5.09	30
MAY	4.72	11.11	7.67	31
JUNE	5.83	18.33	11.26	29
JULY	6.94	23.33	16.41	31
AUGUST	13.89	22.78	20.11	30
SEPTEMBER	11.39	19.17	17.27	24
OCTOBER	4.72	16.39	12.79	31
NOVEMBER	4.17	10.28	7.34	30
DECEMBER	1.94	5.56	4.08	31

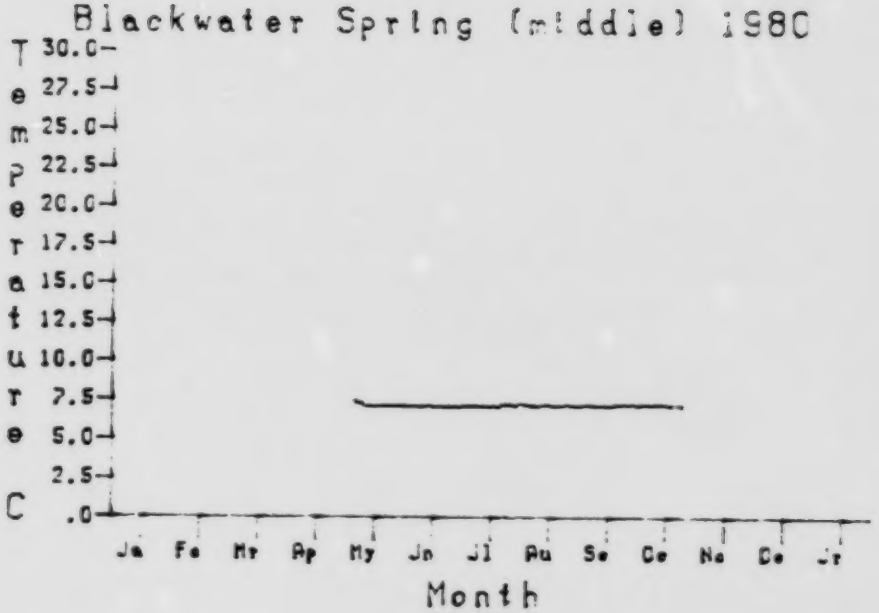
ADAMS RIVER 1980

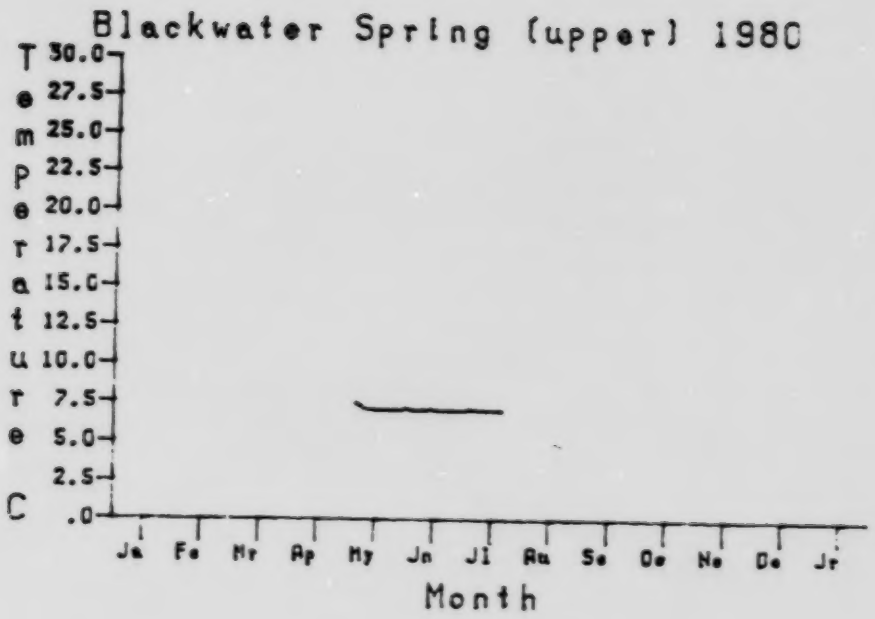
MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	.833	3.889	2.43	22
FEBRUARY	.833	3.889	2.46	23
MARCH	1.389	6.667	3.8	31
APRIL	3.611	8.722	6.11	30
MAY	5.167	9.889	6.32	31
JUNE	6.111	16.944	11.71	30
JULY	7.222	21.833	16.01	31
AUGUST	9.556	21.944	17.42	31
SEPTEMBER	9.056	19.833	14.98	30
OCTOBER	6.111	15.556	12.53	31
NOVEMBER	4.167	10.556	6.81	30
DECEMBER	2.778	5	3.71	31

ADAMS RIVER 1981

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	3.222	4.333	3.64	25
FEBRUARY	1.944	5.111	3.73	28
MARCH	3.333	6.111	4.6	31
APRIL	4.167	7.222	5.17	30
MAY	-15.122	10.944	6.56	28
JUNE	4.722	13.889	8.95	28
JULY	5.556	20.167	14.12	31
AUGUST	14.444	24.167	20.04	31
SEPTEMBER	7.5	19.167	16.27	30
OCTOBER	5.556	12.5	10.2	31
NOVEMBER	5.278	8.889	7.33	30
DECEMBER	2.778	5.278	4.41	31


Blackwater Spring (lower) 1980
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month


Blackwater Spring (middle) 1980
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month


Blackwater Spring (upper) 1980
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

BLACKWATER SPRING (LOWER) 1980

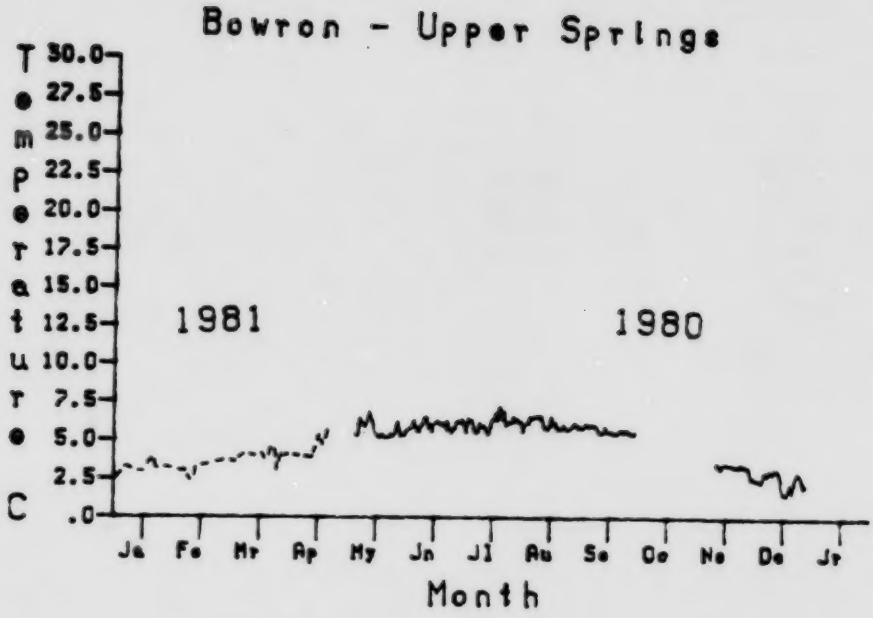
MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY	6	6.9	6.48	8
AUGUST	5.8	6.9	6.39	31
SEPTEMBER	5.8	6.8	6.16	23
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

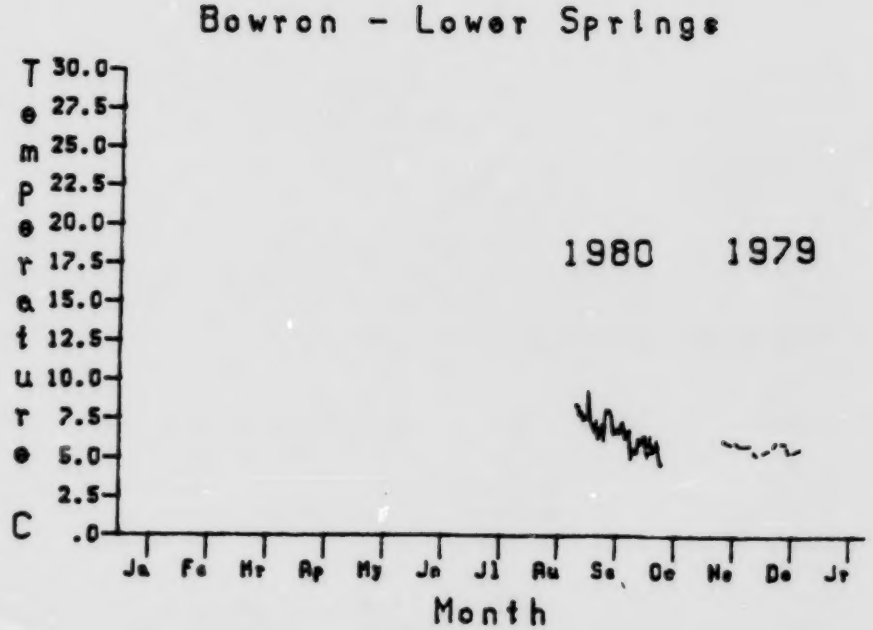
BLACKWATER SPRING(MIDDLE) 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY	7	7.4	7.1	24
JUNE	7	7.1	7.05	30
JULY	7	7.2	7.09	31
AUGUST	7.1	7.2	7.14	31
SEPTEMBER	7.1	7.2	7.14	30
OCTOBER	7.1	7.2	7.15	27
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

BLACKWATER SPRING (UPPER) 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY	7	7.5	7.06	24
JUNE	7	7.2	7.05	30
JULY	7	7.2	7.04	24
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		


Bowron - Upper Springs
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
1981
1980
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month


Bowron - Lower Springs
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
1980
1979
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

BOWRON - LOWER SPRINGS 1979

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST	4.5	11.9	8.15	4
SEPTEMBER	3.2	13.9	6.96	30
OCTOBER	2.8	9	5.73	12
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

BOWRON - LOWER SPRINGS 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER	5.1	6.4	5.89	18
DECEMBER	5	6.3	5.66	24

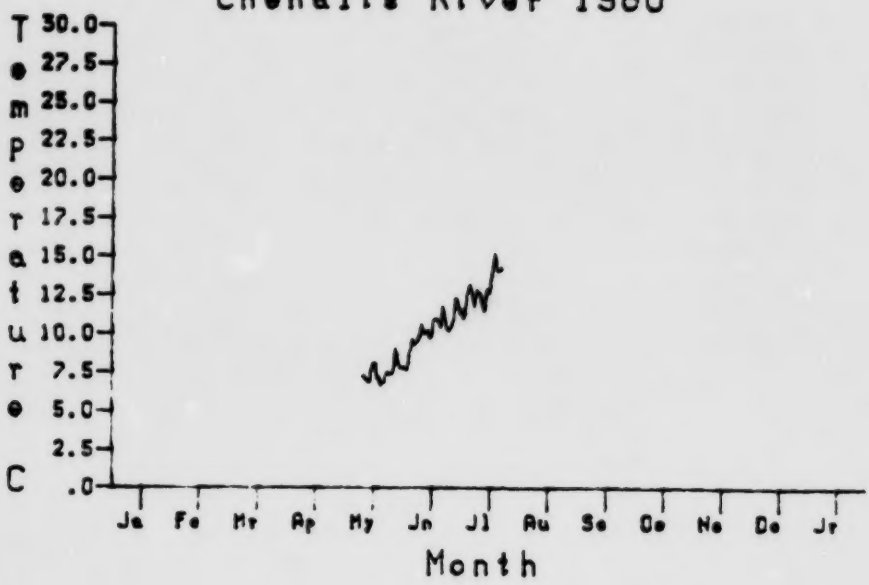
BOWRON - UPPER SPRINGS 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY	4.3	8.5	5.66	24
JUNE	4.5	8.1	5.92	30
JULY	5	8.6	6.15	31
AUGUST	5	8.1	6.1	31
SEPTEMBER	4.9	7.1	5.71	30
OCTOBER	4.5	6.5	5.45	2
NOVEMBER	3	3.6	3.42	17
DECEMBER	1	3.3	2.54	31

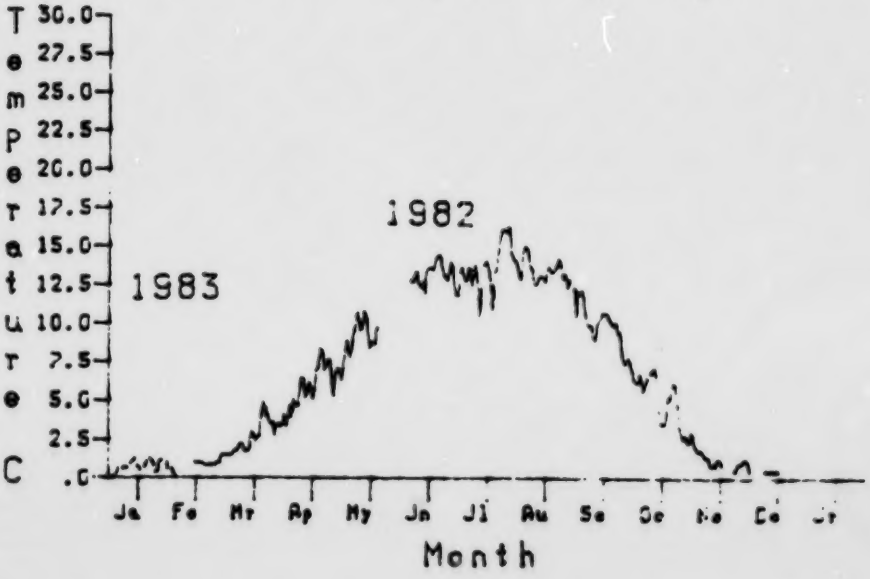
BOWRON - UPPER SPRINGS 1981

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	2.5	3.8	3.19	31
FEBRUARY	2.2	4.4	3.28	28
MARCH	2.8	5.5	4	31
APRIL	3	7.3	4.38	23
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

Chehalis River 1980



Chilco - Baylliff Spring



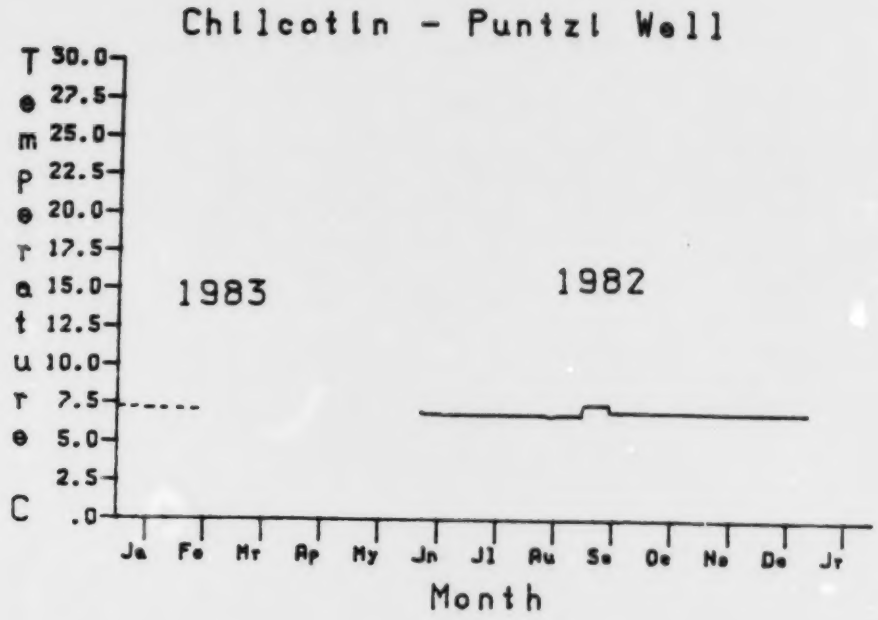
MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY	6.1	10	7.46	19
JUNE	7.2	13.2	9.84	30
JULY	10.2	16.5	12.73	25
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

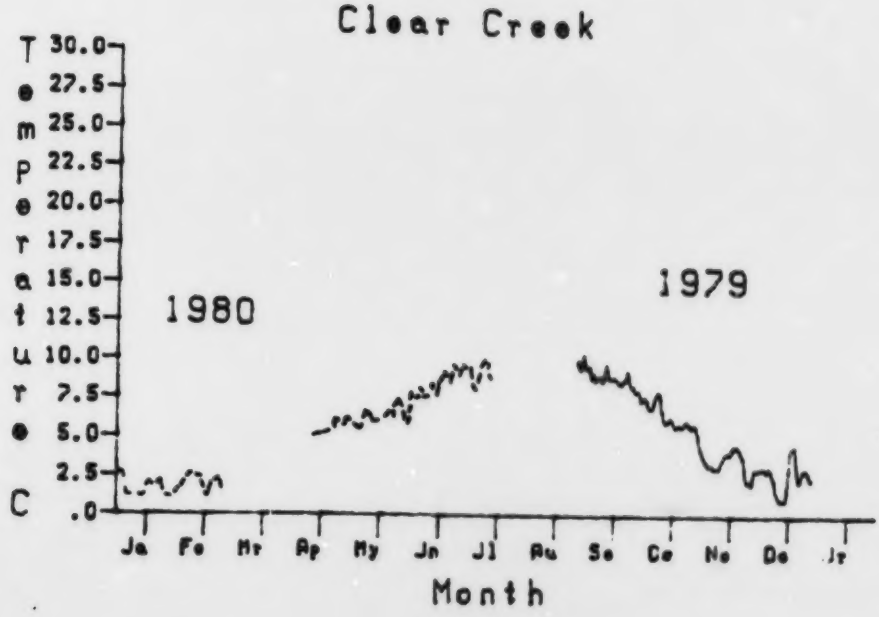
CHILKO - BAYLIFF SPRING 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY	.8	1	.91	14
MARCH	1.2	5.8	2.56	31
APRIL	2.5	10.8	5.73	30
MAY	4.5	12.9	8.75	22
JUNE	11	15.5	13.19	22
JULY	9.75	17.75	13.43	31
AUGUST	11	15.75	13.39	31
SEPTEMBER	6.5	13.25	10.11	29
OCTOBER	2	8	5.35	30
NOVEMBER	.5	3.5	1.41	24
DECEMBER	0	1.25	.66	12

CHILKO - BAYLIFF SPRING 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	.5	1.25	.69	29
FEBRUARY	0	.5	.42	3
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		


Chilcotin - Puntzi Well
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
1983
1982
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month


Clear Creek
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
1980
1979
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

CHILCOTIN - PUNTZI WELL 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE	6.7	7	6.81	22
JULY	6.8	6.8	6.8	31
AUGUST	6.7	6.8	6.79	31
SEPTEMBER	6.8	7.5	7.22	30
OCTOBER	7	7	7	31
NOVEMBER	7	7	7	30
DECEMBER	7	7	7	31

CHILCOTIN - PUNTZI WELL 1983

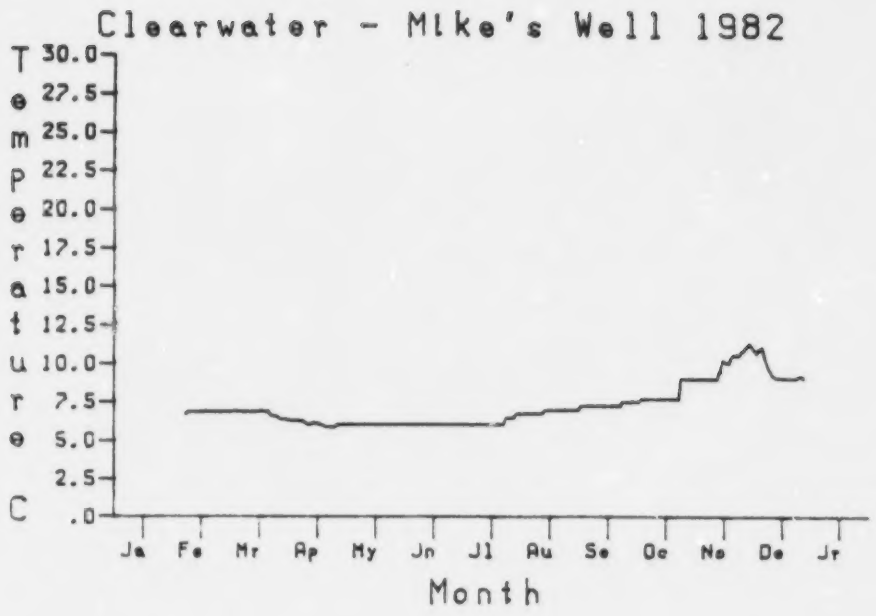
MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	7	7	7	31
FEBRUARY	7	7	7	11
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

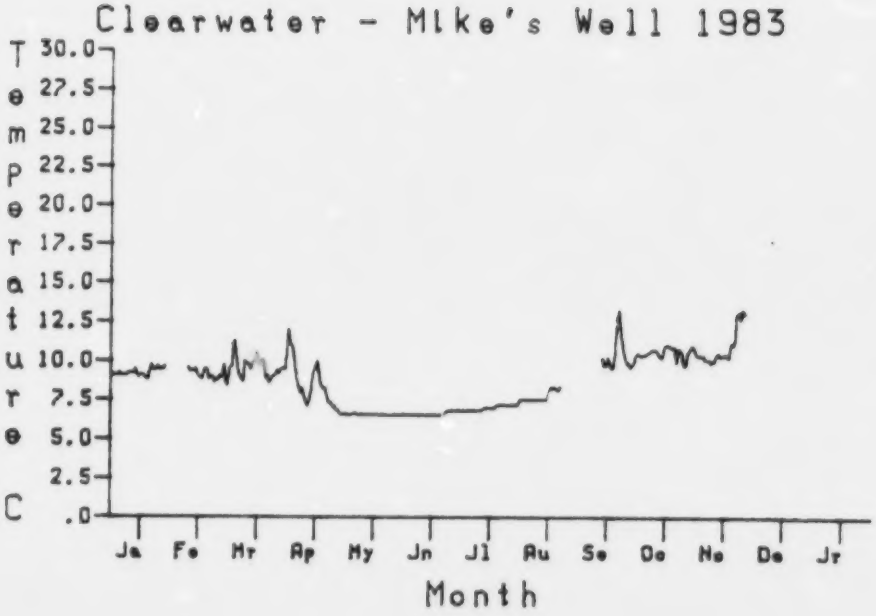
CLEAR CREEK 1979

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST	8.7	10.7	9.6	2
SEPTEMBER	7.1	11.8	8.83	30
OCTOBER	5.1	8.7	6.5	31
NOVEMBER	1.7	5.8	3.55	30
DECEMBER	1	4.7	2.62	31

CLEAR CREEK 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	1	2.9	1.48	31
FEBRUARY	1.1	3.2	2.01	24
MARCH		NO DATA		
APRIL	4	7.2	5.49	16
MAY	4	8.7	6.23	31
JUNE	5.2	11.3	8.2	30
JULY	7.6	11.9	9.11	14
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		


Clearwater - Mike's Well 1982
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

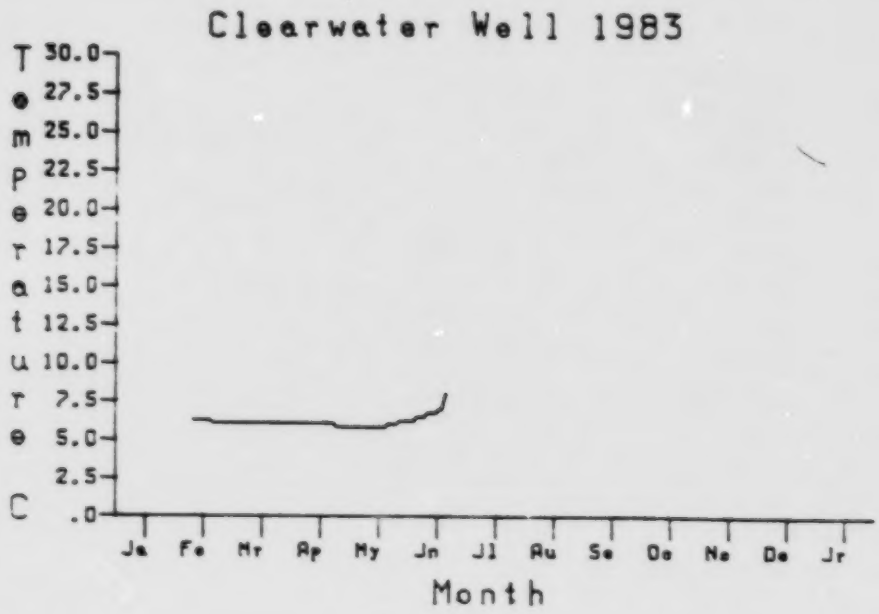

Clearwater - Mike's Well 1983
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

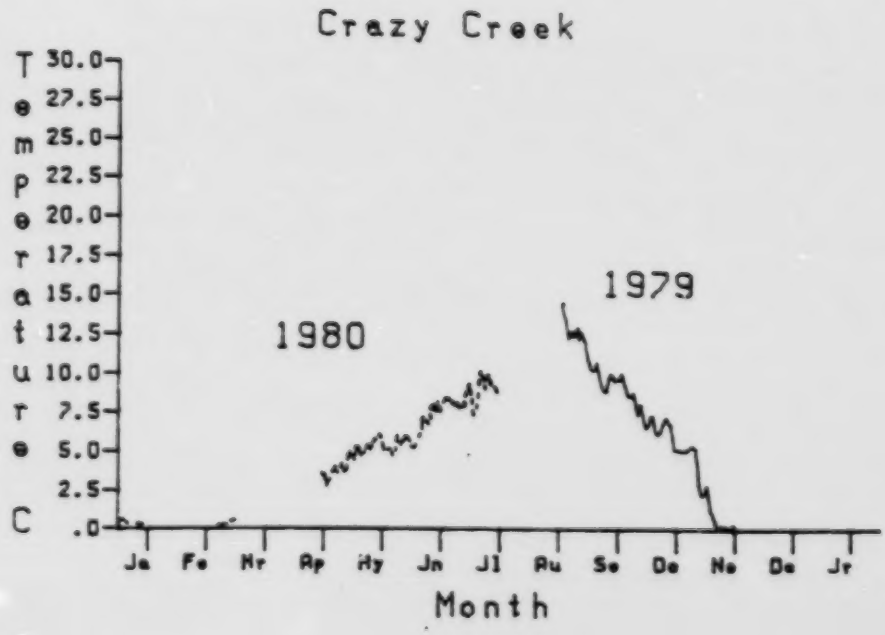
CLEARWATER - MIKES WELL 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY	6.6	6.9	6.81	22
MARCH	6.3	6.9	6.72	31
APRIL	5.8	6.3	6.03	30
MAY	6	6	6	31
JUNE	6	6	6	30
JULY	6	6.5	6.09	31
AUGUST	6.75	7	6.88	31
SEPTEMBER	7	7.5	7.27	30
OCTOBER	7.5	9	7.91	31
NOVEMBER	9	11.25	9.69	30
DECEMBER	9	11.75	9.73	31

CLEARWATER - MIKES WELL 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	8.75	10.25	9.2	29
FEBRUARY	8	10.5	9.07	19
MARCH	8	12.5	9.49	31
APRIL	6.75	12.5	8.58	30
MAY	6.5	6.75	6.51	31
JUNE	6.5	7	6.55	30
JULY	6.8	7.2	6.96	31
AUGUST	7.2	8.75	7.66	25
SEPTEMBER	9.5	14	10.52	15
OCTOBER	9.5	11.75	10.43	31
NOVEMBER	9.5	13.75	10.83	30
DECEMBER		NO DATA		


Clearwater Well 1983
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month


Crazy Creek
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
1979
1980
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

CLEARWATER WELL 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY	6	6.25	6.13	19
MARCH	6	6	6	31
APRIL	5.75	6	5.96	30
MAY	5.75	6.25	5.85	31
JUNE	6.25	8.5	6.67	23
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

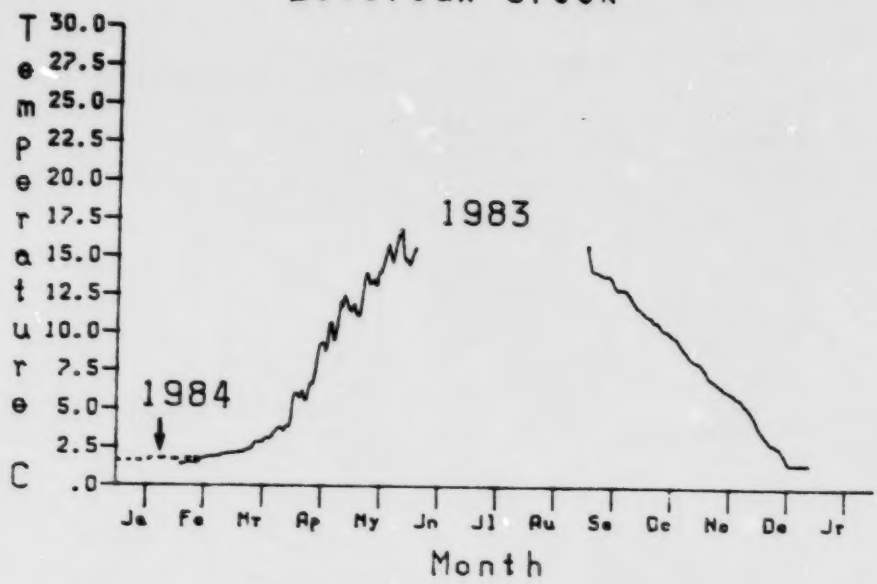
CRAZY CREEK 1979

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST	11.3	15.6	12.86	11
SEPTEMBER	7.2	12.3	9.56	30
OCTOBER	2.3	8.2	5.9	31
NOVEMBER	0	2.9	.91	17
DECEMBER		NO DATA		

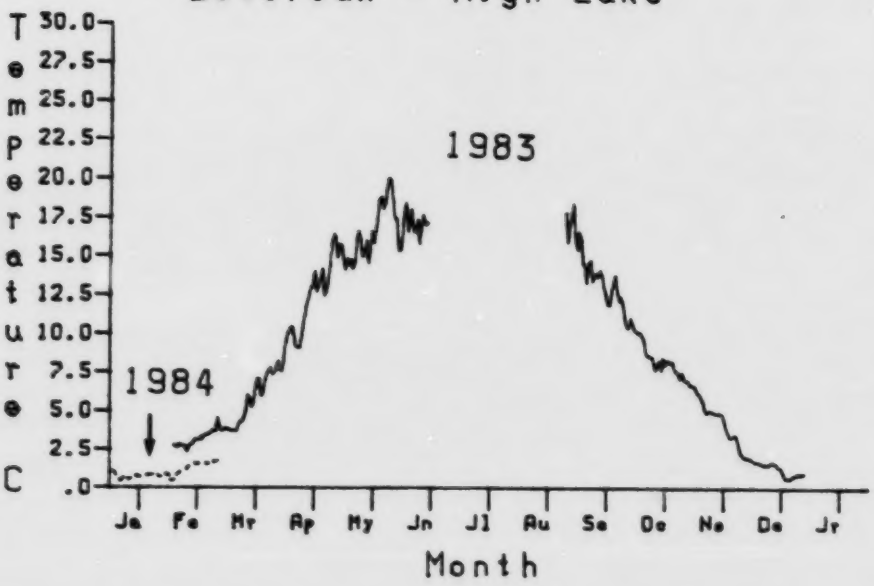
CRAZY CREEK 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	0	.5	.38	8
FEBRUARY	0	.5	.36	7
MARCH		NO DATA		
APRIL	2.6	5.3	3.6	14
MAY	3.5	7.7	5.3	31
JUNE	5	10.4	7.34	30
JULY	6.7	12.1	9.09	18
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

Devereux Creek



Devereux - High Lake



DEVEREUX CREEK 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY	1.3	2.3	1.75	26
MARCH	2	4.1	2.86	31
APRIL	3.8	13.3	8.05	30
MAY	10.3	17.1	13.7	31
JUNE	14	16.8	14.92	6
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER	11.8	16	13.45	26
OCTOBER	8.2	11.8	10.08	31
NOVEMBER	4.8	8.2	6.51	30
DECEMBER	1.4	4.8	2.49	31

DEVEREUX CREEK 1984

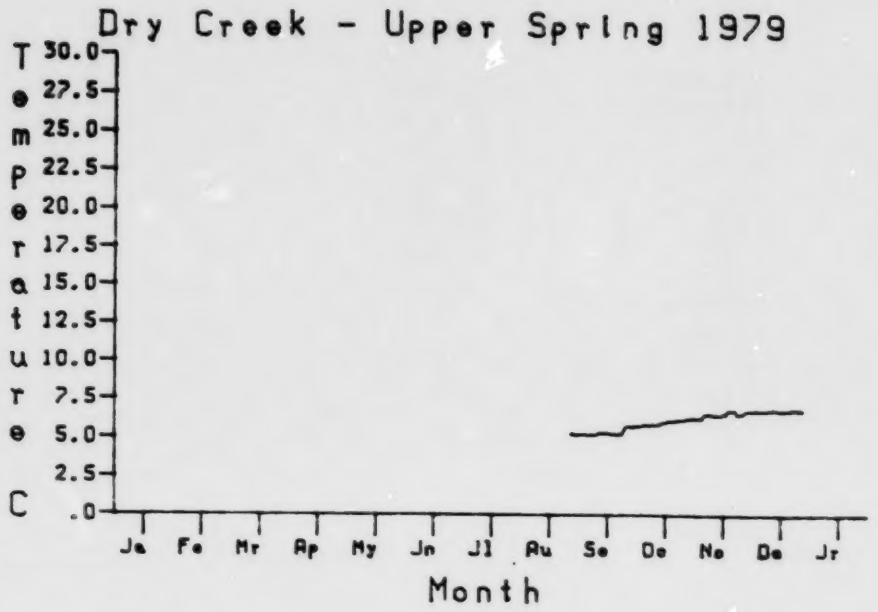
MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	1.4	1.7	1.57	31
FEBRUARY	1.6	1.6	1.6	11
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

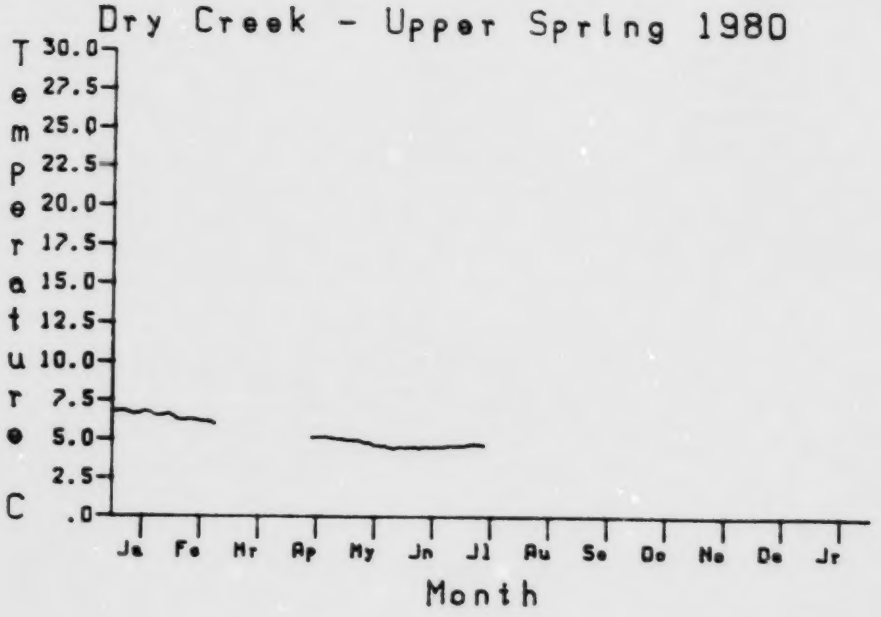
DEVEREUX - HIGH LAKE 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY	2	5.2	3.16	26
MARCH	3	9.5	5.65	31
APRIL	7.1	19.2	11.99	30
MAY	12	23.5	16.47	31
JUNE	14.1	21.5	16.89	16
JULY		NO DATA		
AUGUST	15.3	20.1	17.01	4
SEPTEMBER	8.3	20.6	13.54	30
OCTOBER	6.6	13.3	8.48	31
NOVEMBER	1.8	6.9	4.54	30
DECEMBER	.5	2.2	1.3	31

DEVEREUX - HIGH LAKE 1984

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	.2	1.3	.83	31
FEBRUARY	.3	2.3	1.42	23
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		


Dry Creek - Upper Spring 1979
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

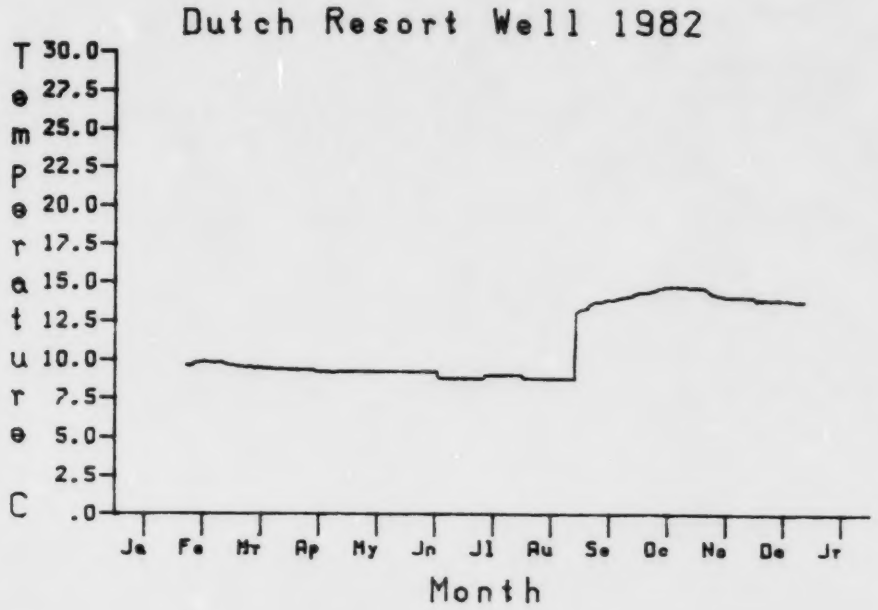

Dry Creek - Upper Spring 1980
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

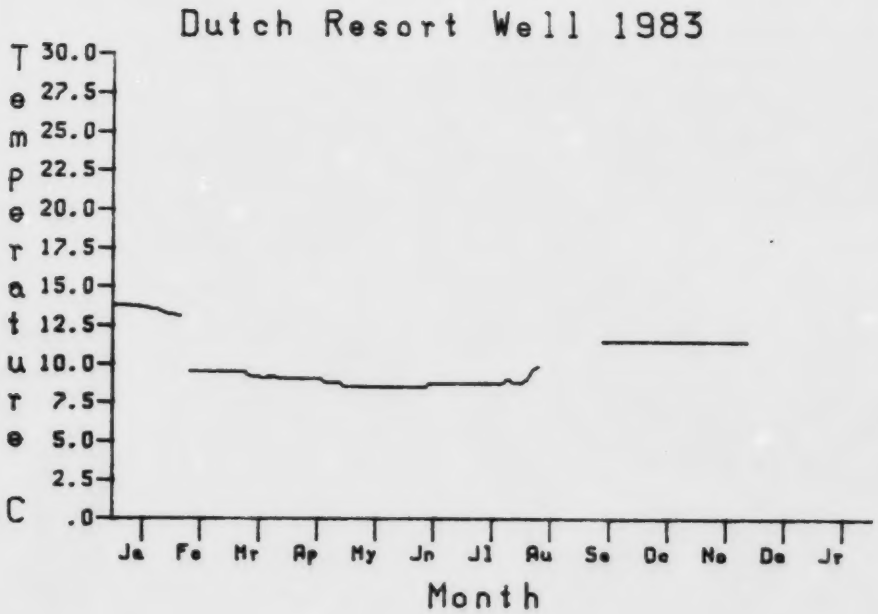
DRY CREEK - UPPER SPRING 1979

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST	5.1	5.2	5.18	2
SEPTEMBER	5.1	5.8	5.28	30
OCTOBER	5.7	6.4	6	31
NOVEMBER	6.2	6.9	6.54	30
DECEMBER	6.7	6.9	6.83	31

DRY CREEK - UPPER SPRING 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	6.4	6.9	6.68	31
FEBRUARY	5.9	6.5	6.2	23
MARCH		NO DATA		
APRIL	4.9	5.2	5.1	16
MAY	4.3	5	4.69	31
JUNE	4.3	4.6	4.51	30
JULY	4.6	4.8	4.65	15
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		


Dutch Resort Well 1982
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month


Dutch Resort Well 1983
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

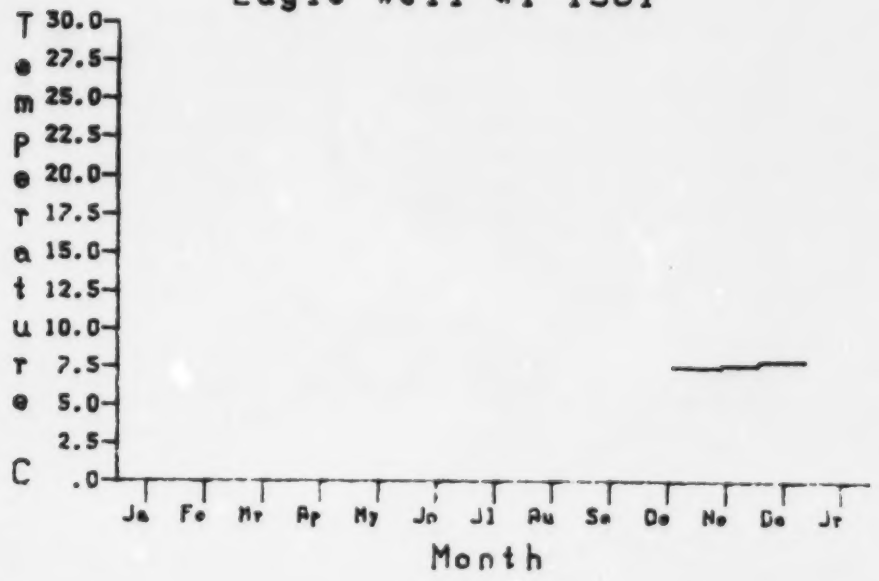
DUTCH RESORT WELL 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY	9.4	9.9	9.74	22
MARCH	9.3	9.7	9.44	31
APRIL	9.1	9.4	9.24	30
MAY	9.25	9.25	9.25	31
JUNE	8.75	9.25	9.07	30
JULY	8.75	9	8.89	31
AUGUST	8.75	9	8.77	31
SEPTEMBER	13.1	14.2	13.75	30
OCTOBER	14.2	14.8	14.6	31
NOVEMBER	14.1	14.8	14.33	30
DECEMBER	13.8	14.1	13.91	31

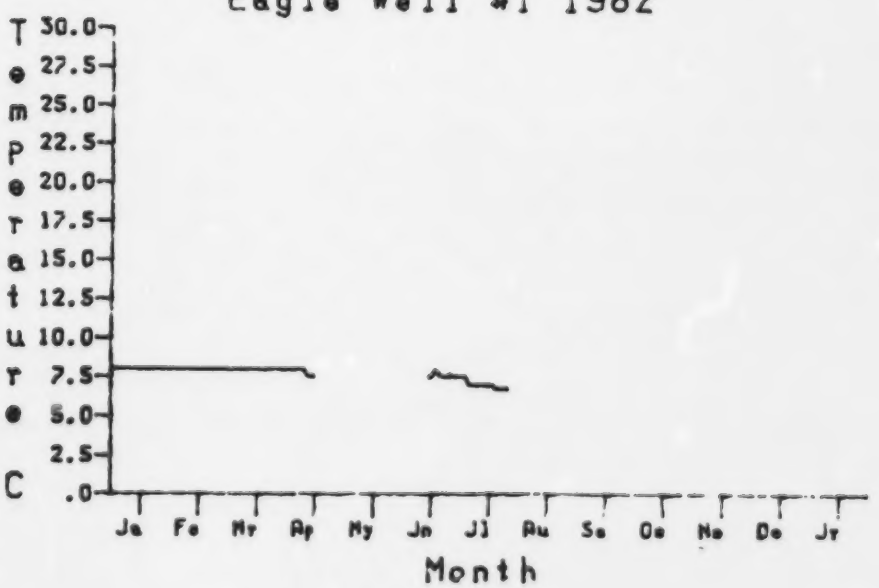
DUTCH RESORT WELL 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	13.2	13.8	13.59	30
FEBRUARY	9.5	13.2	10.26	24
MARCH	9	9.5	9.26	31
APRIL	8.75	9	8.92	30
MAY	8.5	8.5	8.5	31
JUNE	8.5	8.75	8.63	30
JULY	8.75	9	8.78	31
AUGUST	8.75	9.9	9.23	12
SEPTEMBER	11.5	11.5	11.5	16
OCTOBER	11.5	11.5	11.5	31
NOVEMBER	11.5	11.5	11.5	30
DECEMBER		NO DATA		

Eagle Well #1 1981



Eagle Well #1 1982

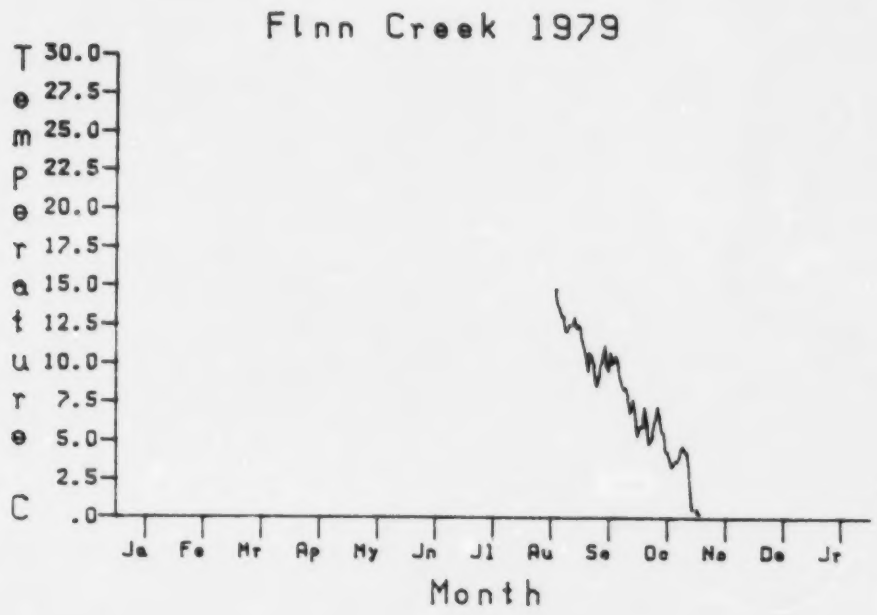


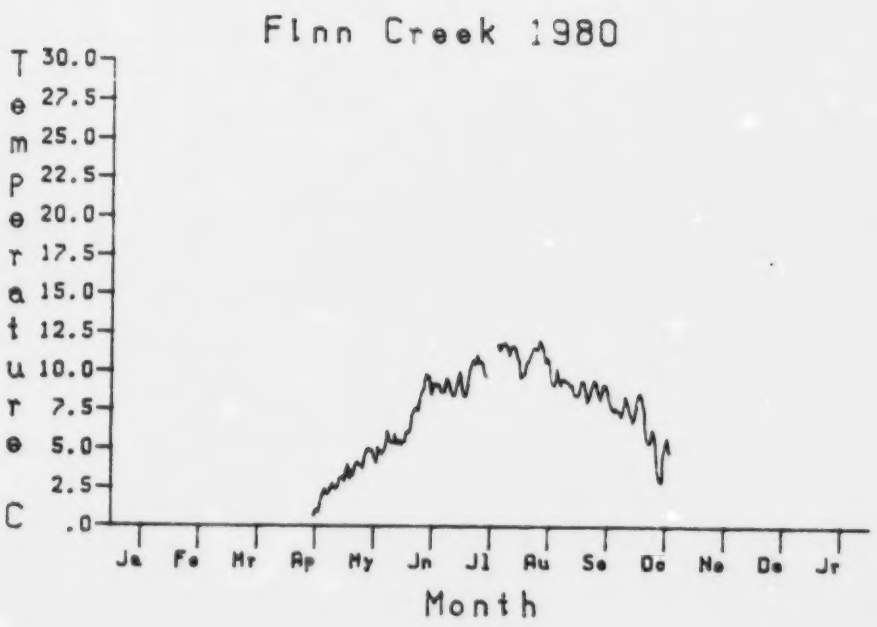
EAGLE WELL #1 1981

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER	7.5	7.5	7.5	10
NOVEMBER	7.5	7.75	7.62	30
DECEMBER	7.75	8	7.95	31

EAGLE WELL #1 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	8	8	8	31
FEBRUARY	8	8	8	28
MARCH	8	8	8	31
APRIL	7.5	8	7.87	17
MAY		NO DATA		
JUNE	7.5	8	7.63	14
JULY	6.75	7.5	7.05	28
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		


Flnn Creek 1979
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

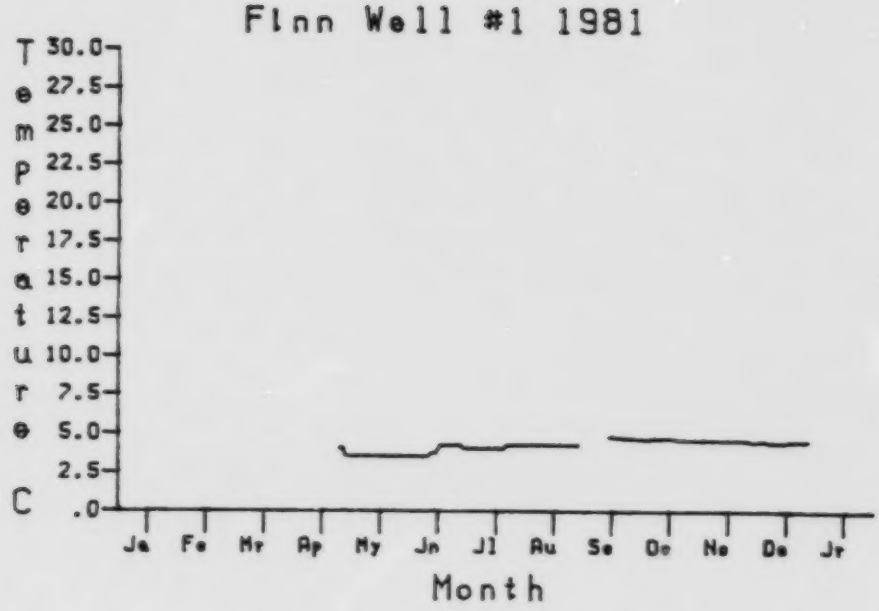

Flnn Creek 1980
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

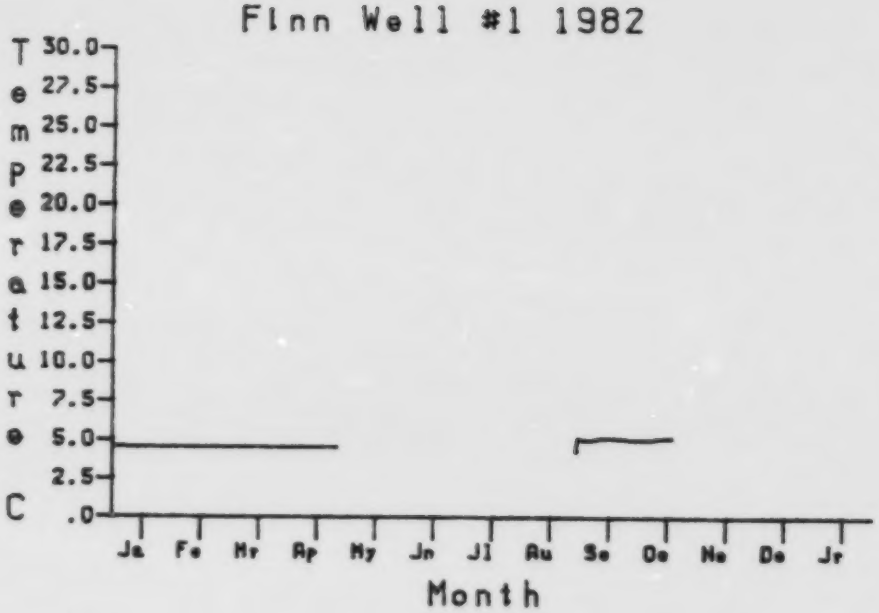
FINN CREEK 1979

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST	11	15	12.95	11
SEPTEMBER	6	13	9.86	30
OCTOBER	1	8	5.06	31
NOVEMBER	-.5	1	-0.42	7
DECEMBER	-.3	-.4	-.48	31

FINN CREEK 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	-.5	-.1	-.47	30
FEBRUARY	-.5	-.1	-.38	25
MARCH		NO DATA		
APRIL	.5	4.2	1.91	14
MAY	1.3	7.8	4.41	31
JUNE	4.5	11.2	7.99	30
JULY	7.1	13.3	10.46	26
AUGUST	7.8	13.1	10.31	31
SEPTEMBER	6.2	10.1	8.36	30
OCTOBER	1.6	9.2	5.94	21
NOVEMBER		NO DATA		
DECEMBER		NO DATA		


Flnn Well #1 1981
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

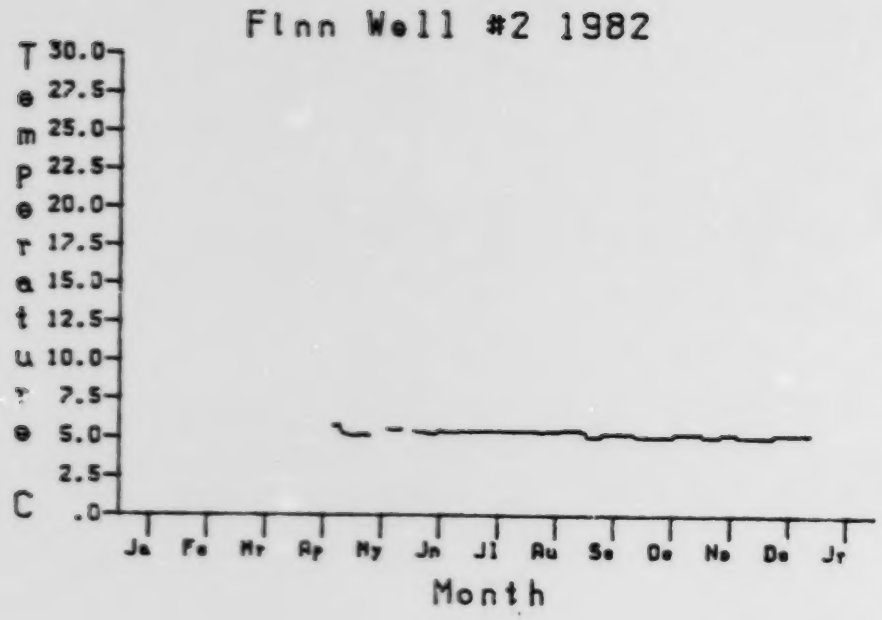

Flnn Well #1 1982
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

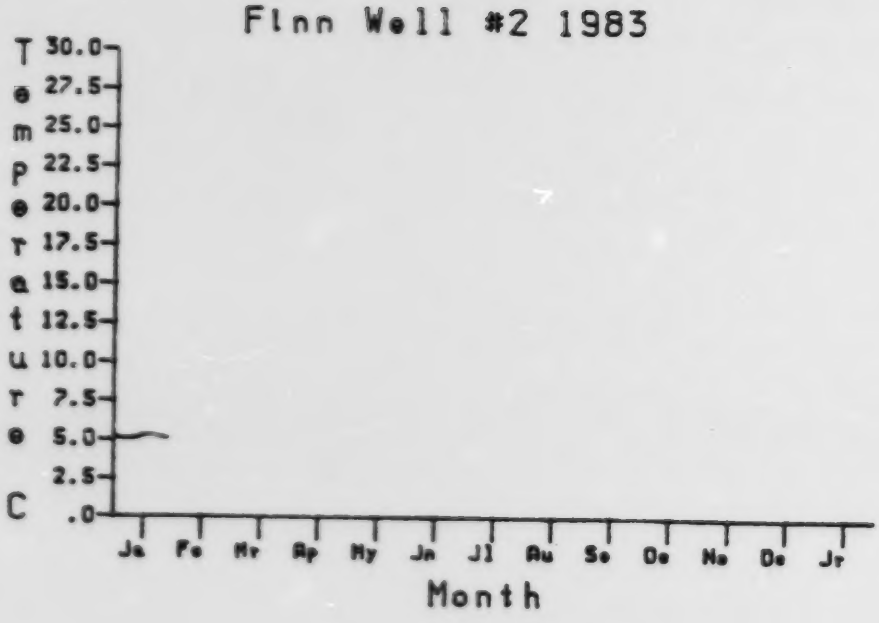
FINN WELL #1 1981

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL	3.5	4	3.88	4
MAY	3.5	3.5	3.5	31
JUNE	3.5	4.25	3.85	30
JULY	4	4.25	4.06	31
AUGUST	4.25	4.25	4.25	31
SEPTEMBER	4.6	4.9	4.72	14
OCTOBER	4.5	4.7	4.61	31
NOVEMBER	4.4	4.5	4.49	30
DECEMBER	4.4	4.5	4.46	31

FINN WELL #1 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	4.4	4.5	4.5	31
FEBRUARY	4.5	4.5	4.5	28
MARCH	4.5	4.5	4.5	31
APRIL	4.5	4.5	4.5	28
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER	4.25	5.2	5.07	30
OCTOBER	5	5.2	5.09	21
NOVEMBER		NO DATA		
DECEMBER		NO DATA		


Flnn Well #2 1982
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

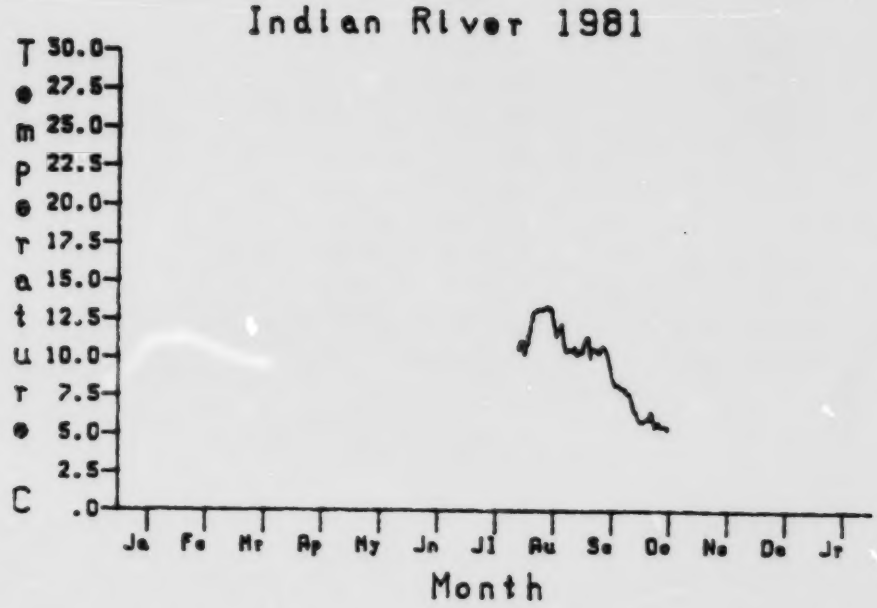

Flnn Well #2 1983
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

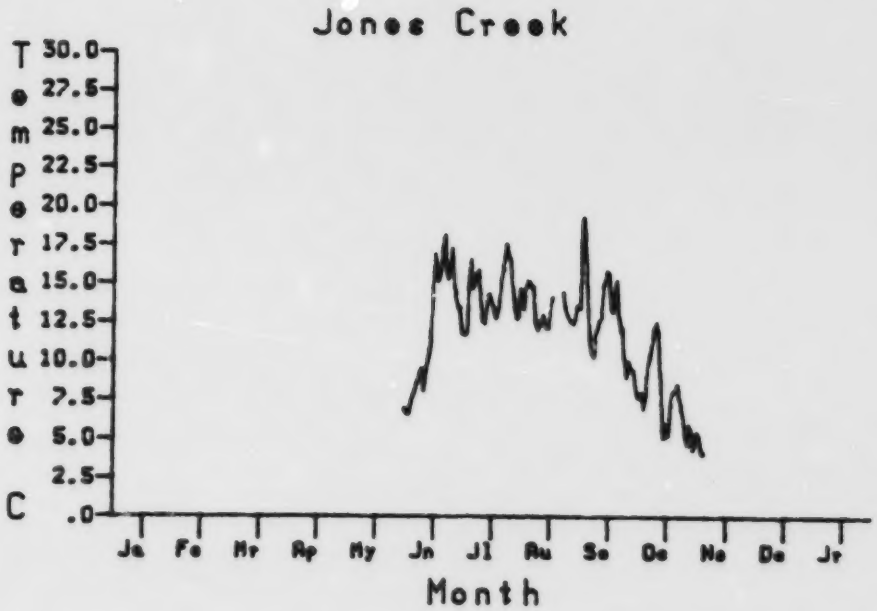
FINN WELL #2 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL	5.1	5.9	5.47	8
MAY	5	5.7	5.26	20
JUNE	5.2	5.6	5.3	26
JULY	5.3	5.4	5.4	31
AUGUST	5.3	5.5	5.42	31
SEPTEMBER	5	5.5	5.17	30
OCTOBER	5	5.25	5.1	31
NOVEMBER	5	5.25	5.09	30
DECEMBER	5	5.25	5.16	31

FINN WELL #2 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	5	5.3	5.15	26
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		


Indian River 1981
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month


Jones Creek
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

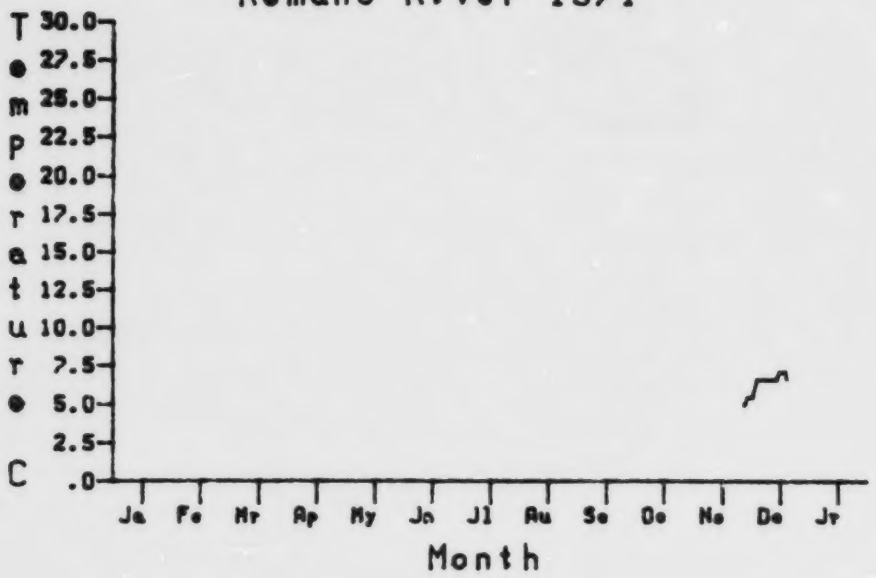
INDIAN RIVER 1981

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY	10	11.2	10.6	1
AUGUST	9.1	15.1	11.88	31
SEPTEMBER	6.1	12.9	9.42	30
OCTOBER	4.5	7.1	5.83	18
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

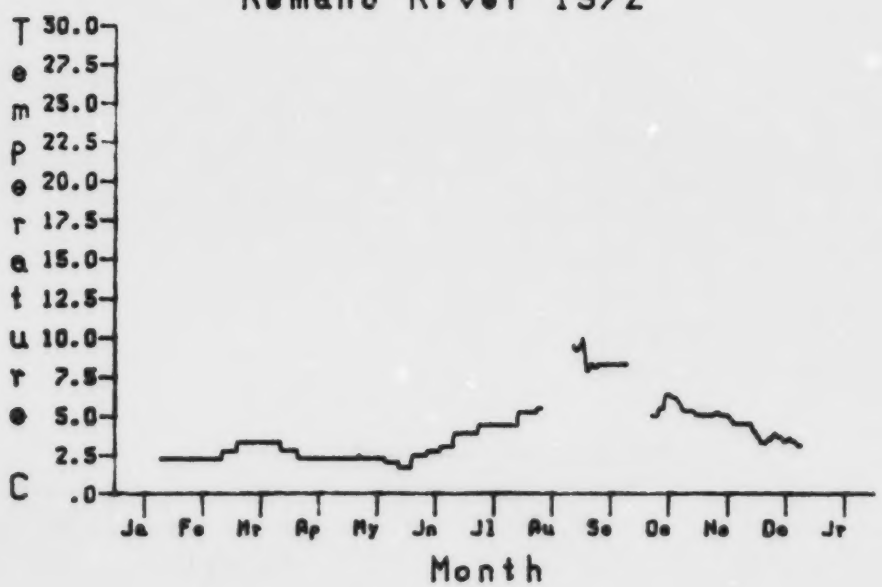
JONES CREEK 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE	5.8	20.7	11.92	28
JULY	10.9	21.4	14.25	31
AUGUST	9.8	18.9	13.28	26
SEPTEMBER	6.6	26	13.19	30
OCTOBER	3	15.1	8.02	31
NOVEMBER	3.2	7.5	4.8	7
DECEMBER		NO DATA		

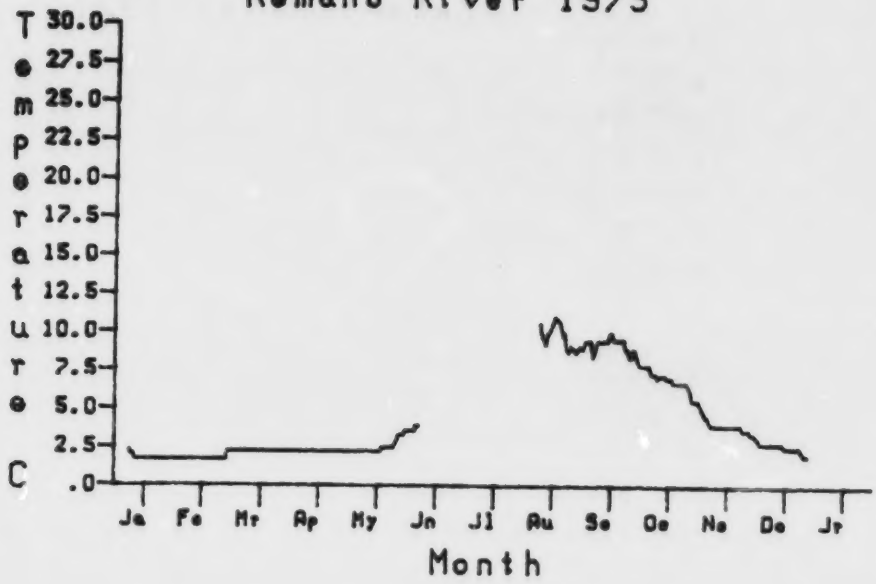
Kemano River 1971



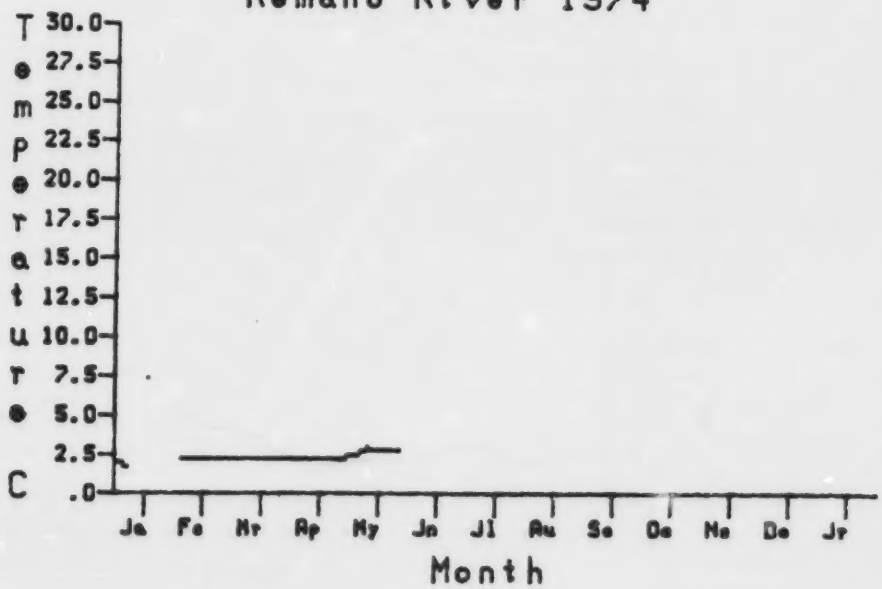
Kemano River 1972



Kemano River 1973



Kemano River 1974



KEMANO RIVER 1974

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY			1.83	7
FEBRUARY			2.22	25
MARCH			2.22	31
APRIL			2.22	30
MAY			2.7	29
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

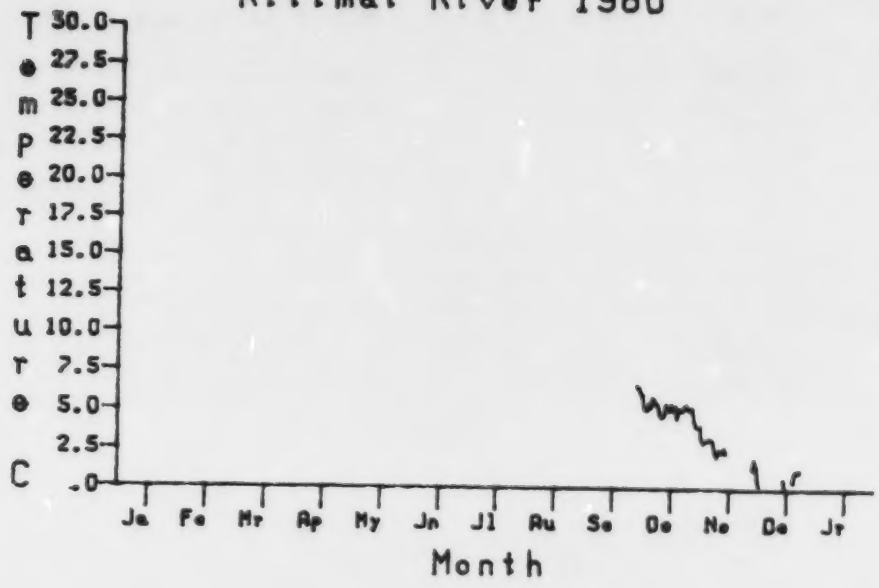
KEMANO RIVER 1971

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER			5	1
DECEMBER			6.47	23

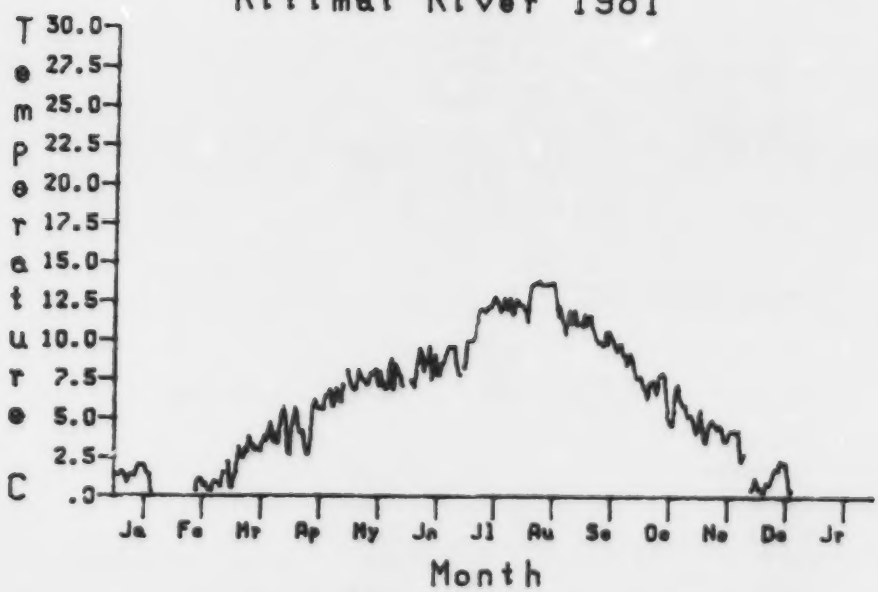
KEMANO RIVER 1973

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY			1.71	24
FEBRUARY			1.67	28
MARCH			2.22	31
APRIL			2.22	30
MAY			2.4	31
JUNE			3.64	9
JULY		NO DATA		
AUGUST			9.81	20
SEPTEMBER			9.23	30
OCTOBER			7.13	31
NOVEMBER			4.18	30
DECEMBER			2.67	31

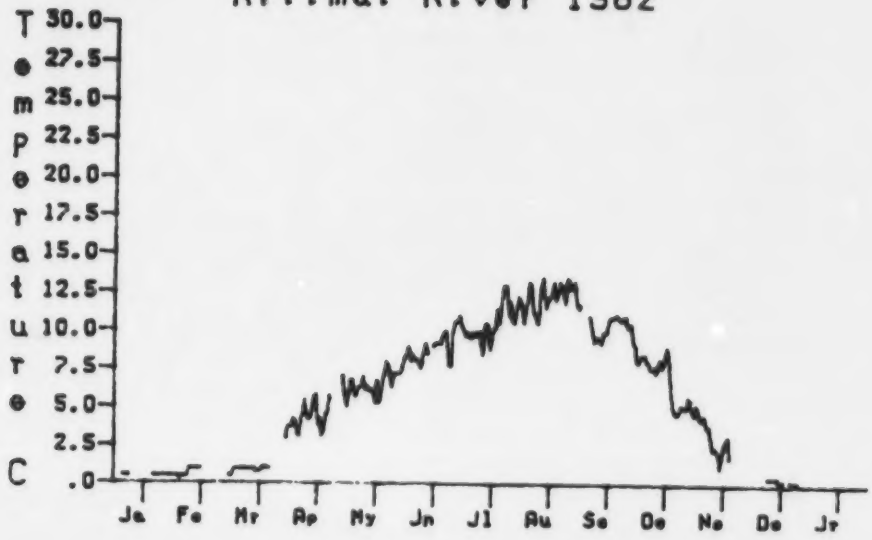
Kitimat River 1980



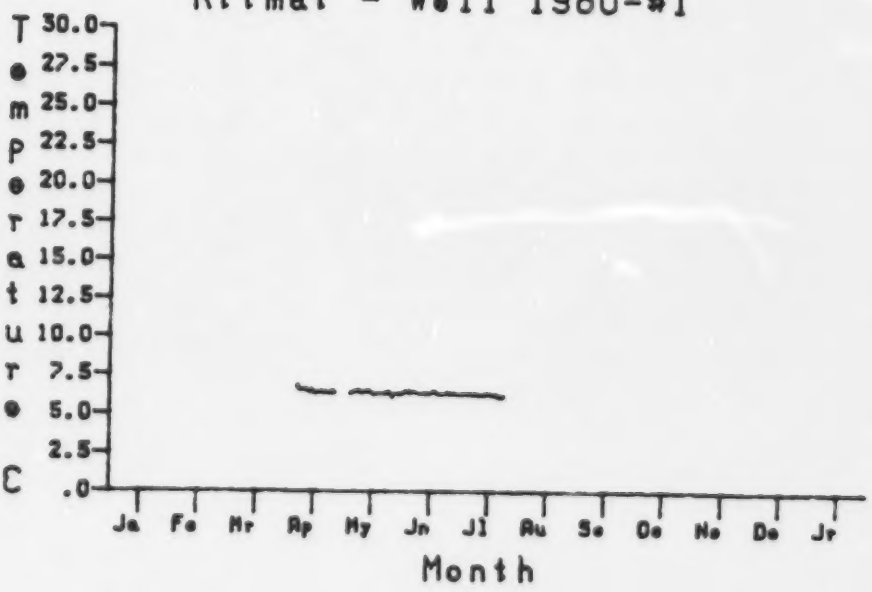
Kitimat River 1981



Kitimat River 1982



Kitmat - Well 1980-#1



KITIMAT RIVER 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER	4.1	7	5.34	31
NOVEMBER	1.8	4.5	3.03	17
DECEMBER	0	2	1	11

KITIMAT RIVER 1981

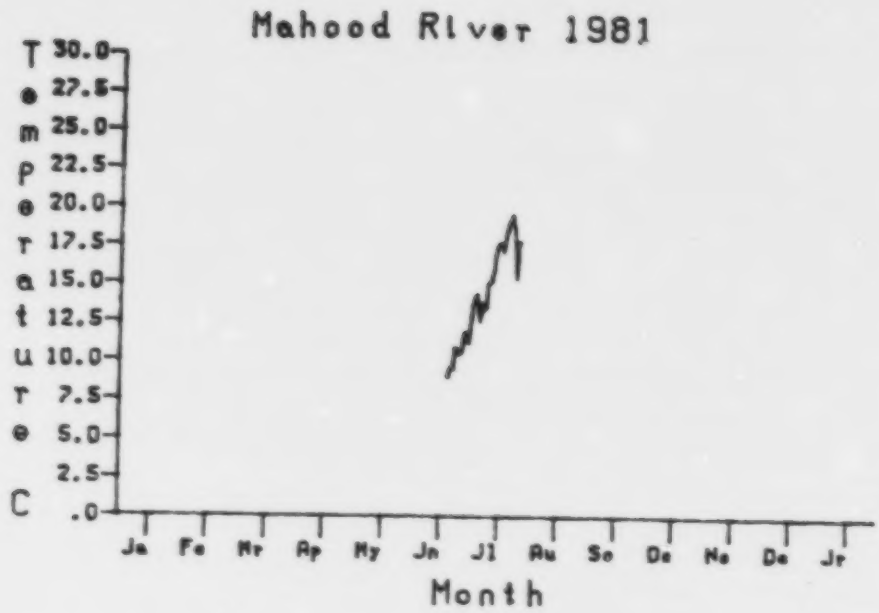
MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	0	2.1	1.44	20
FEBRUARY	0	2.1	.84	16
MARCH	0	6.8	3.21	31
APRIL	.5	8.9	5.13	30
MAY	5	10.8	7.56	30
JUNE	6	11.9	8.52	27
JULY	7	14.75	11.53	30
AUGUST	9.8	15.8	12.53	31
SEPTEMBER	7.25	13	10.03	30
OCTOBER	4	8.75	6.5	31
NOVEMBER	2	6	4.08	27
DECEMBER	0	2.6	1.16	22

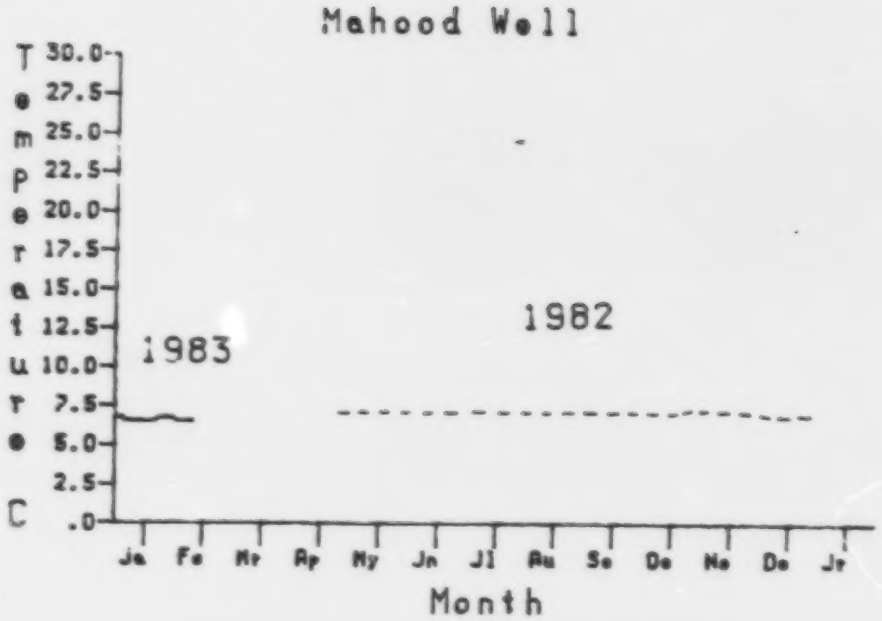
KITIMAT RIVER 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	.5	.5	.5	16
FEBRUARY	0	1	.72	15
MARCH	.5	1	.9	22
APRIL	2	7.75	4.26	24
MAY	4	10.5	6.45	31
JUNE	5.5	13	8.81	28
JULY	8	15	10.52	31
AUGUST	9.5	15.5	12.28	31
SEPTEMBER	8.5	14.5	10.65	26
OCTOBER	4	11	7.27	31
NOVEMBER	1	5.5	3.44	22
DECEMBER	0	.5	.35	14

KITIMAT - WELL 1980-#1

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL	6.2	7	6.43	20
MAY	6	6.8	6.35	24
JUNE	6	6.8	6.33	30
JULY	6	6.6	6.23	27
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		


Mahood River 1981
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month


Mahood Well
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
1983
1982
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

MAHOOD RIVER 1981

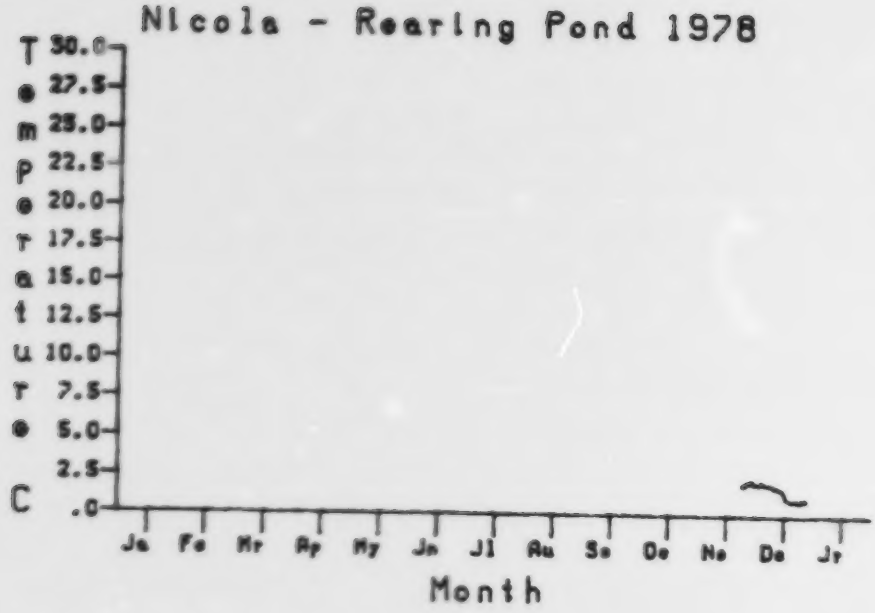
MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE	7.8	12	10.19	9
JULY	10.6	20.3	15.62	30
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

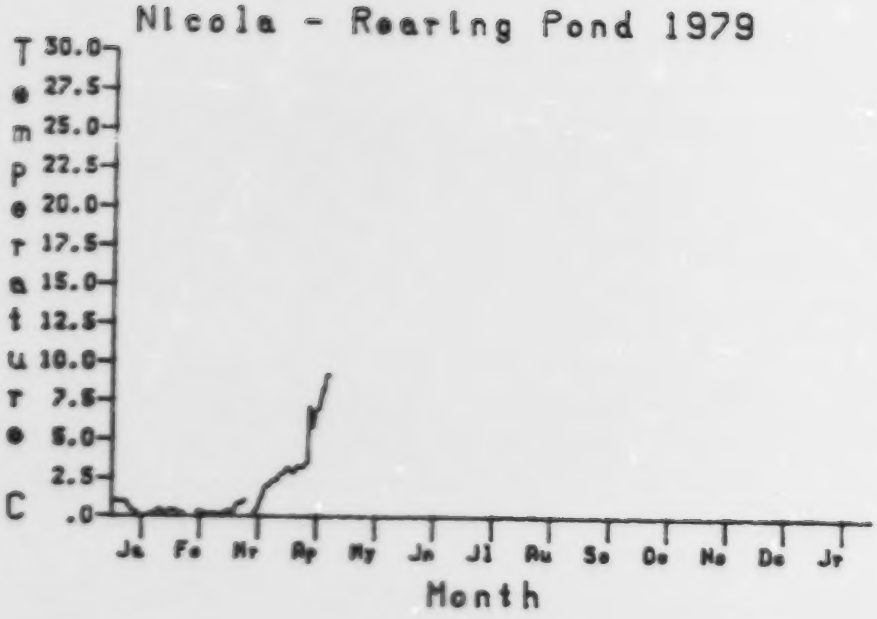
MAHOOD WELL 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL	7	7	7	4
MAY	7	7	7	31
JUNE	7	7	7	30
JULY	7	7	7	31
AUGUST	7	7	7	31
SEPTEMBER	7	7	7	30
OCTOBER	7	7.2	7.05	31
NOVEMBER	7	7.3	7.12	30
DECEMBER	6.8	7	6.84	31

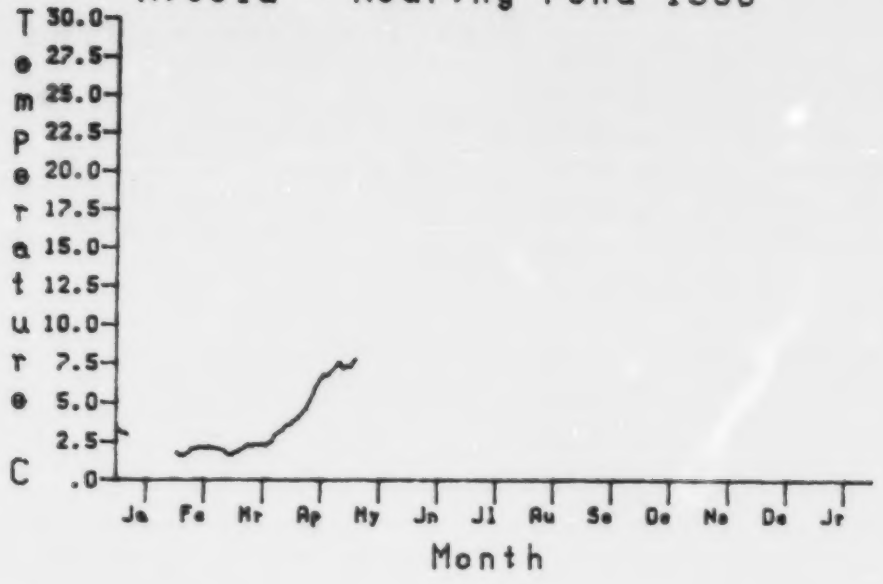
MAHOOD WELL 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	6.5	6.75	6.6	31
FEBRUARY	6.5	6.5	6.5	10
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

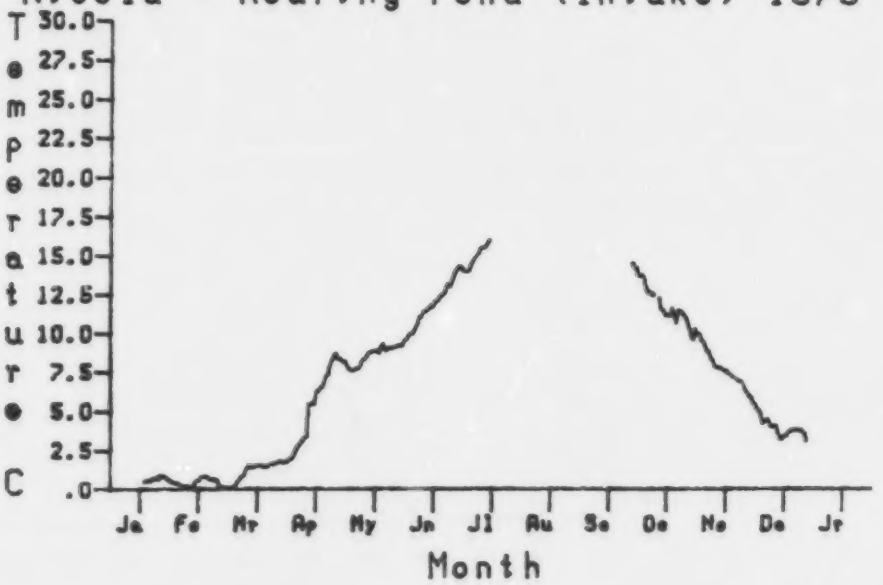

Nicola - Rearing Pond 1978
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month


Nicola - Rearing Pond 1979
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

Nicola - Rearing Pond 1980



Nicola - Rearing Pond (Intake) 1979



NICOLA - REARING POND 1978

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER	1.9	2.4	2.11	4
DECEMBER	.8	2.5	1.6	31

NICOLA - REARING POND 1979

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	-.4	1.1	-2.87	30
FEBRUARY	-.3	.6	.15	27
MARCH	.1	2.8	1.32	27
APRIL	2.8	33	6.4	24
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

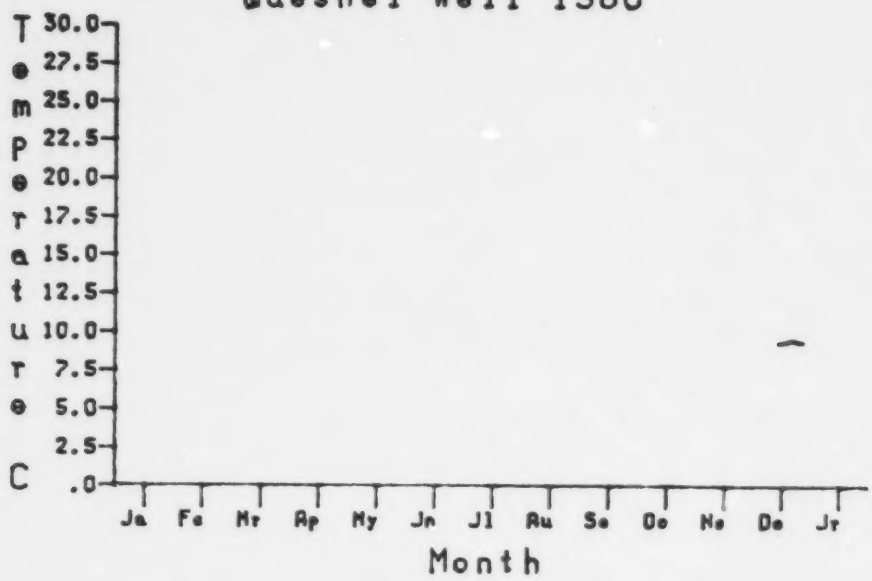
NICOLA - REARING POND 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	2.7	3.4	3.03	6
FEBRUARY	1.3	2.3	1.91	28
MARCH	1.3	3.8	2.4	31
APRIL	3.4	7.8	5.72	30
MAY	6.9	8.2	7.45	6
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

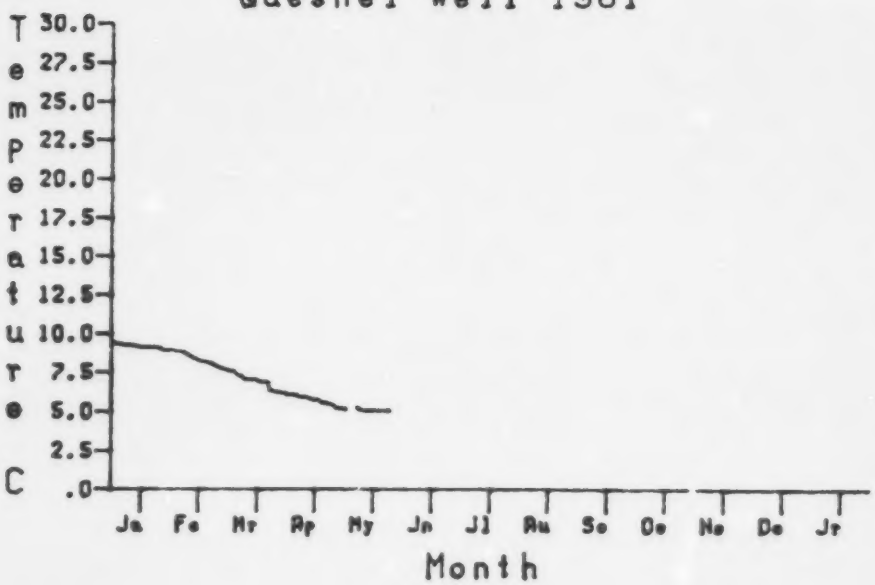
NICOLA - REARING POND (INTAKE) 1979

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	.2	1.1	.68	14
FEBRUARY	-.1	1.1	.41	28
MARCH	-.2	2	1.09	31
APRIL	1.5	9.4	5.04	30
MAY	7.4	10	8.52	31
JUNE	9	14.1	11.47	30
JULY	13.8	16.2	14.84	18
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER	9.6	15.8	12.12	29
NOVEMBER	5.9	10.8	8.03	30
DECEMBER	3	6	4.13	31

Quesnel Well 1980



Quesnel Well 1981



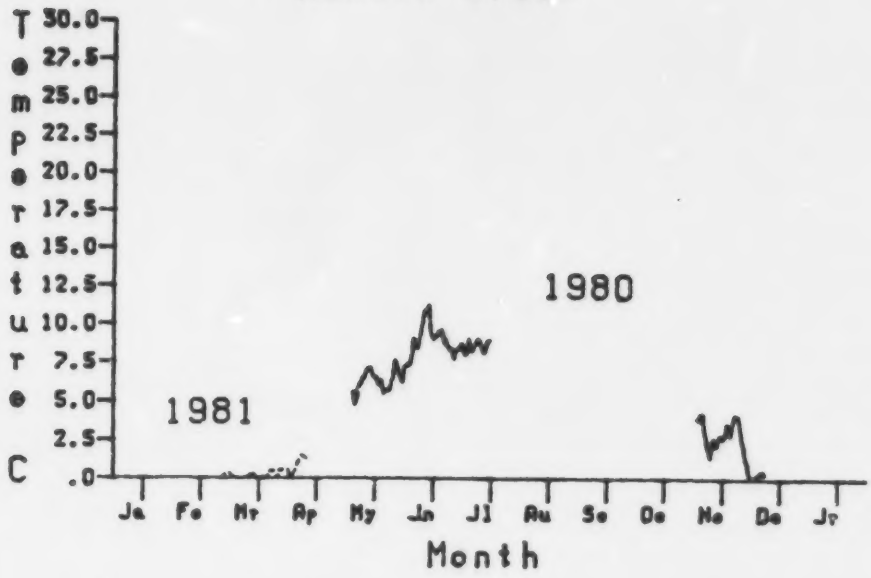
QUESNEL WELL 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER	9.4	9.7	9.5	14

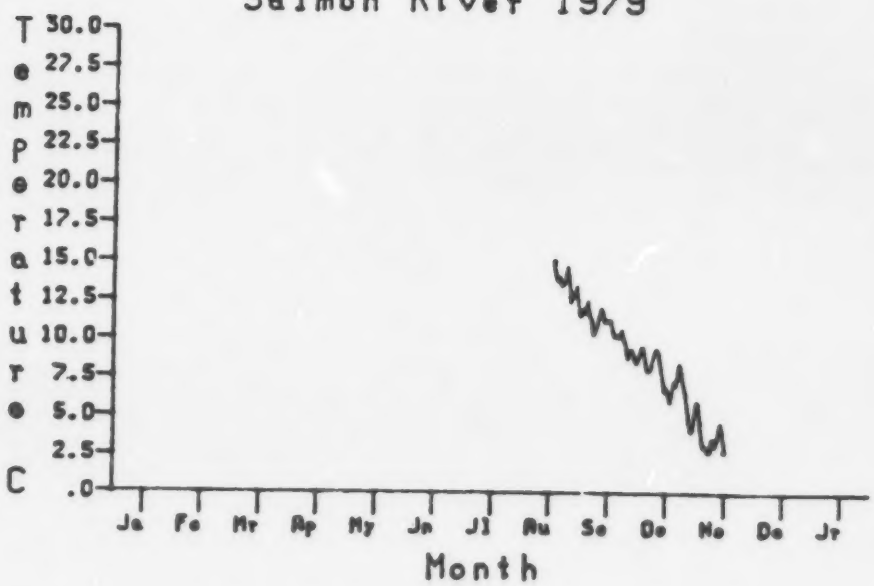
QUESNEL WELL 1981

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	8.9	9.4	9.12	31
FEBRUARY	7.7	8.9	8.34	28
MARCH	6.1	7.7	6.93	31
APRIL	5.2	6.1	5.72	30
MAY	5	5.4	5.05	22
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

Rankin Creek



Salmon River 1979



RANKIN CREEK 1980

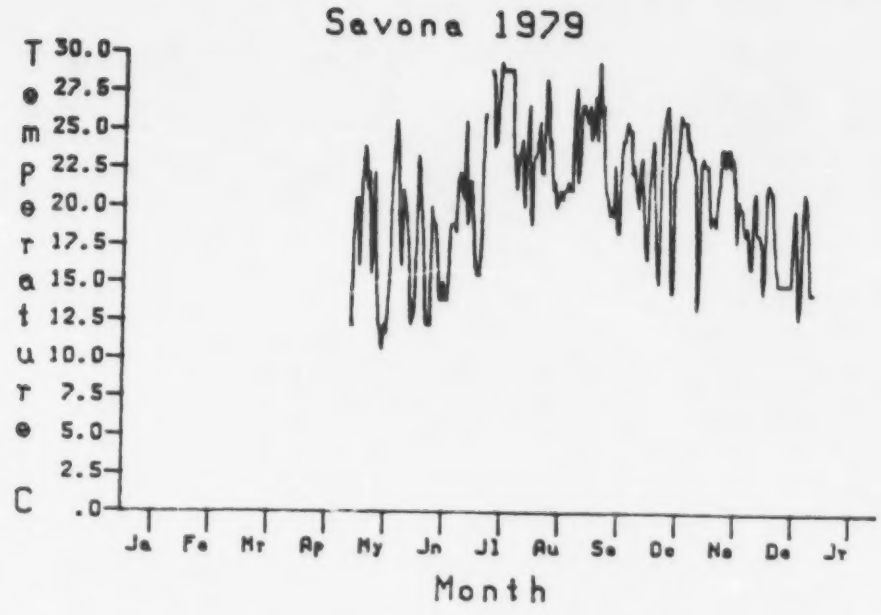
MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY	4	9.7	6.32	25
JUNE	5.1	13.7	8.76	30
JULY	6.8	10.5	8.55	18
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER	.9	4.7	3.04	25
DECEMBER	-.9	1.9	-.41	31

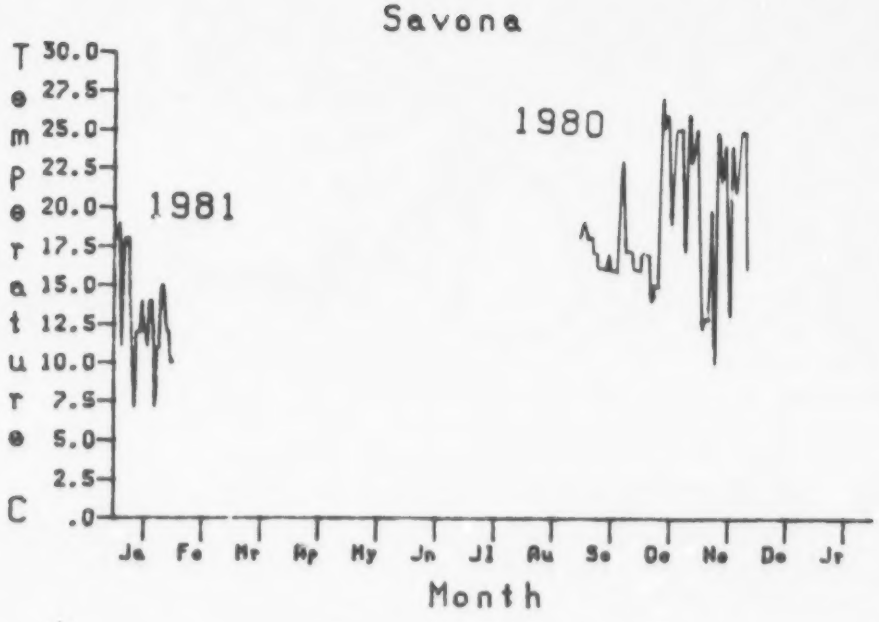
RANKIN CREEK 1981

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	-1	.3	-4.07	29
FEBRUARY	-1	-.1	-.7	28
MARCH	-1	1	0	31
APRIL	-.2	2.5	.67	10
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

SALMON RIVER 1979

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST	11.8	16.1	13.79	11
SEPTEMBER	8.2	14.3	11.05	30
OCTOBER	3.8	10.2	7.82	31
NOVEMBER	2	6.4	3.9	19
DECEMBER		NO DATA		


Savona 1979
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month


Savona
1980
1981
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

SAVONA 1979

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	23.88	23.88	23.88	1
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY	10.549	25.551	18.13	31
JUNE	12.22	25.551	17.27	30
JULY	15.55	30.549	24.19	31
AUGUST	18.88	28.33	23.15	31
SEPTEMBER	18.331	29.44	23.33	30
OCTOBER	13.33	26.659	21.36	31
NOVEMBER	16.11	23.88	20.9	30
DECEMBER	12.771	55	17.65	31

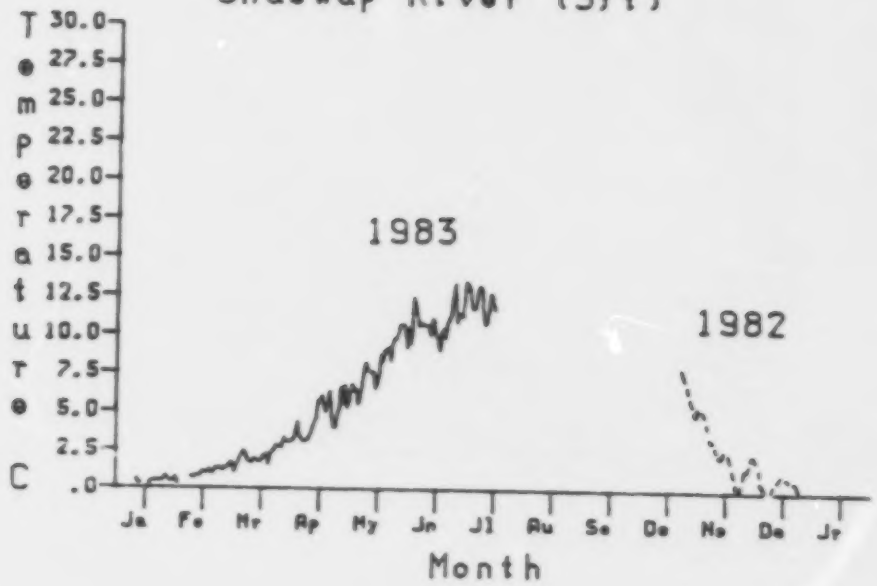
SAVONA 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER	16	23	17.27	30
OCTOBER	14	27	20.35	31
NOVEMBER	1	25	19.57	30
DECEMBER		NO DATA		

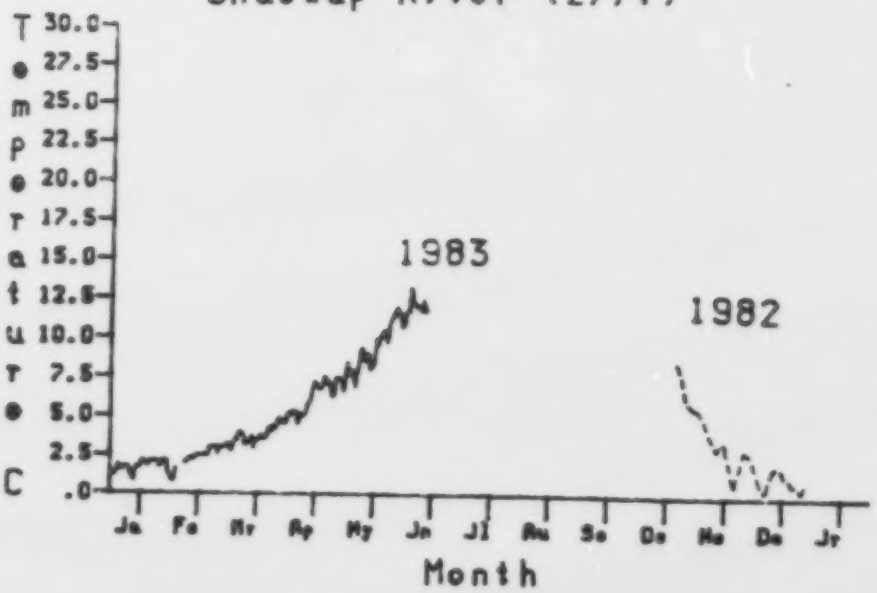
SAVONA 1981

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	7	19	13.03	30
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

Shuswap River (3ft)



Shuswap River (27ft)



SHUSWAP RIVER (27FT) 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	0	1.25	.31	2
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER	6	8.75	7.41	7
NOVEMBER	.5	6.75	3.65	30
DECEMBER	.5	3.25	1.52	31

SHUSWAP RIVER (27FT) 1983

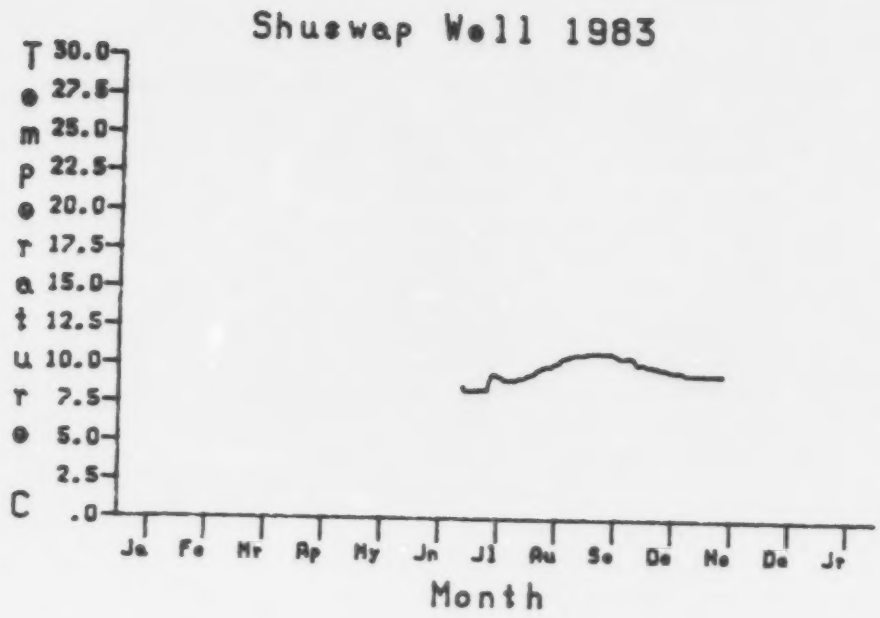
MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	.5	2.25	1.71	31
FEBRUARY	.75	3.5	2.32	24
MARCH	1.5	6	3.67	31
APRIL	3.75	9	6.04	30
MAY	5.5	13.5	9.06	31
JUNE	9.5	14.25	11.93	15
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

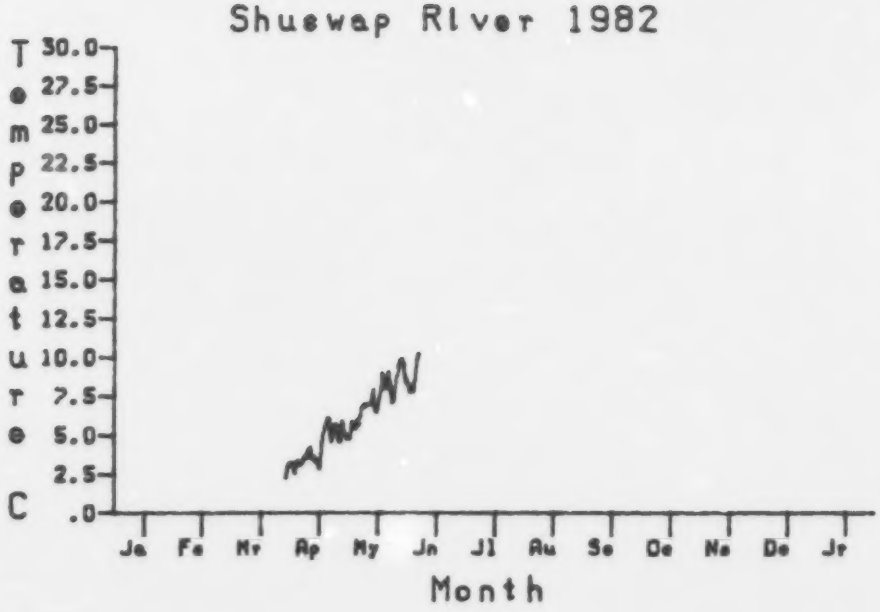
SHUSWAP RIVER (3FT) 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER	5	8	6.54	6
NOVEMBER	0	5.75	2.87	28
DECEMBER	0	2.5	.91	22

SHUSWAP RIVER (3FT) 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	0	1	.49	17
FEBRUARY	0	1.75	1.02	22
MARCH	.5	4.25	2.1	31
APRIL	2	7.75	4.39	30
MAY	3.75	12.5	7.85	31
JUNE	8	14.5	10.79	30
JULY	10	14.5	12.2	19
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		


Shuswap Well 1983
T 30.0
e 27.5
m 25.0
p 22.5
e 20.0
r 17.5
a 15.0
t 12.5
u 10.0
r 7.5
e 5.0
2.5
C .0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month


Shuswap River 1982
T 30.0
e 27.5
m 25.0
p 22.5
e 20.0
r 17.5
a 15.0
t 12.5
u 10.0
r 7.5
e 5.0
2.5
C .0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

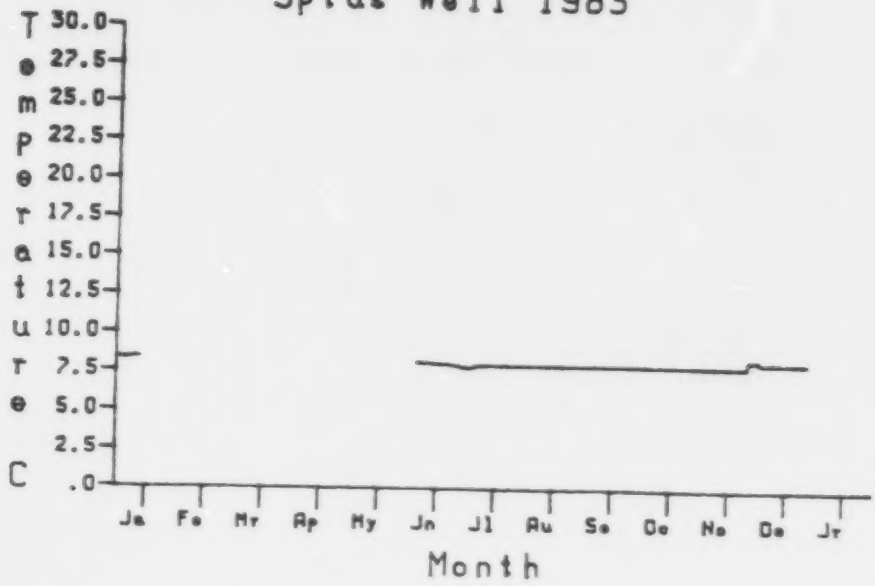
SHUSWAP WELL 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE	8.3	8.9	8.6	1
JULY	8.3	9.5	8.83	31
AUGUST	9.2	10.8	10.1	31
SEPTEMBER	10	10.9	10.73	30
OCTOBER	9.5	10.4	9.8	31
NOVEMBER	9.5	9.5	9.5	14
DECEMBER		NO DATA		

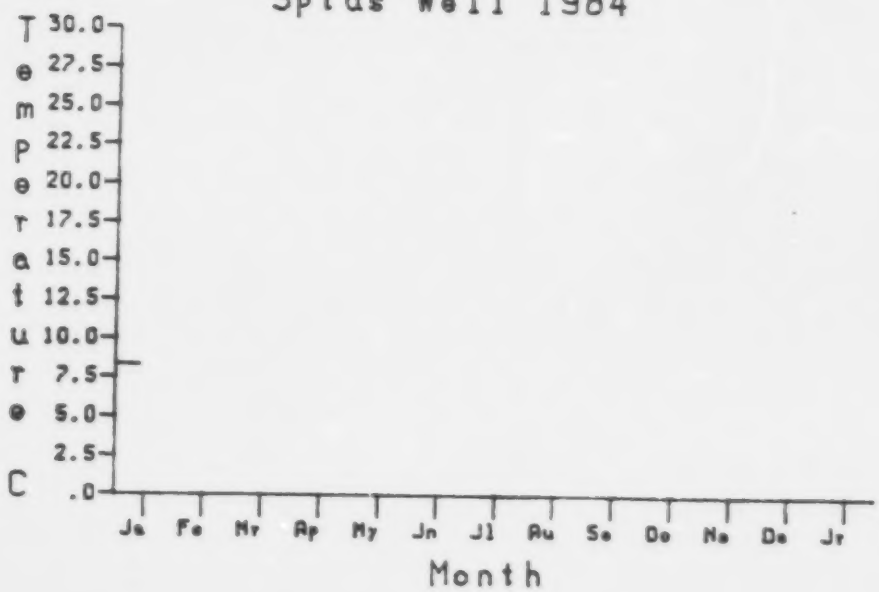
SHUSWAP RIVER 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH	2	2.5	2.25	1
APRIL	1.8	8.3	4.09	30
MAY	3.5	11.75	7.1	31
JUNE	6.5	12	8.81	9
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

Splus Well 1983



Splus Well 1984



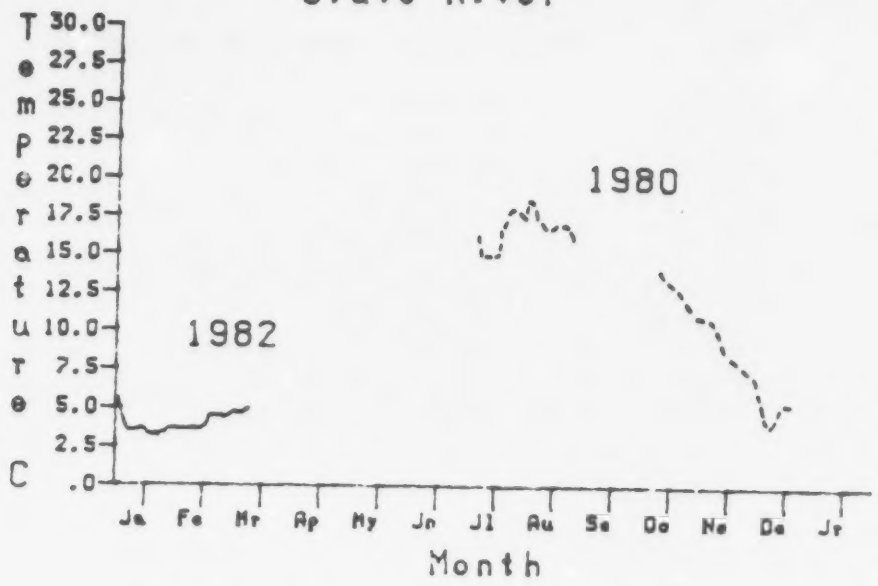
SPIUS WELL 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE	7.9	8.1	8	23
JULY	7.8	8	7.95	31
AUGUST	8	8	8	31
SEPTEMBER	8	8	8	30
OCTOBER	8	8	8	31
NOVEMBER	8	8.5	8.02	30
DECEMBER	8.25	8.5	8.29	31

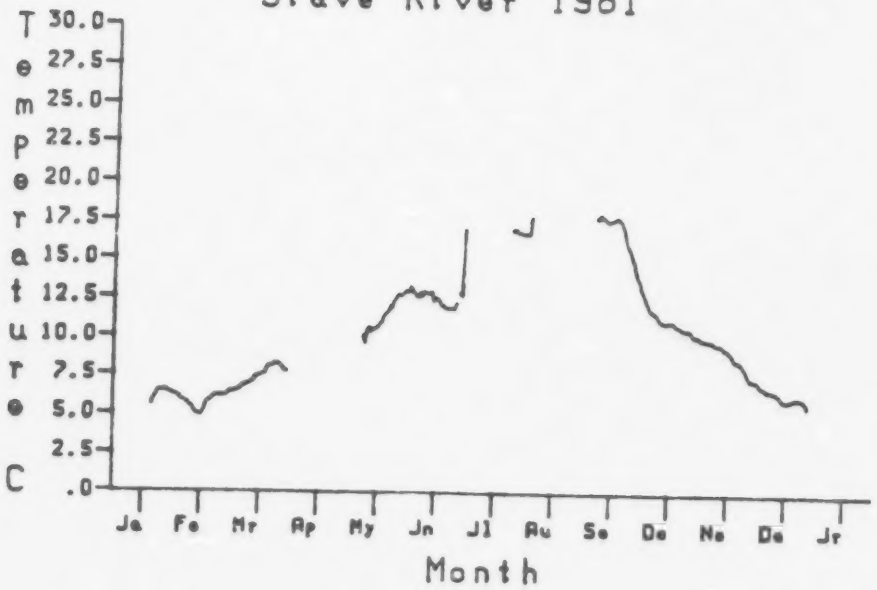
SPIUS WELL 1984

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	8.25	8.25	8.25	12
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

Stave River



Stave River 1981



STAVE RIVER 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY	14.2	18.4	16.21	23
AUGUST	15.9	19	17.11	30
SEPTEMBER		NO DATA		
OCTOBER	11.1	13.9	12.62	18
NOVEMBER	7.3	11.3	9.37	30
DECEMBER	3.7	7.3	5.37	22

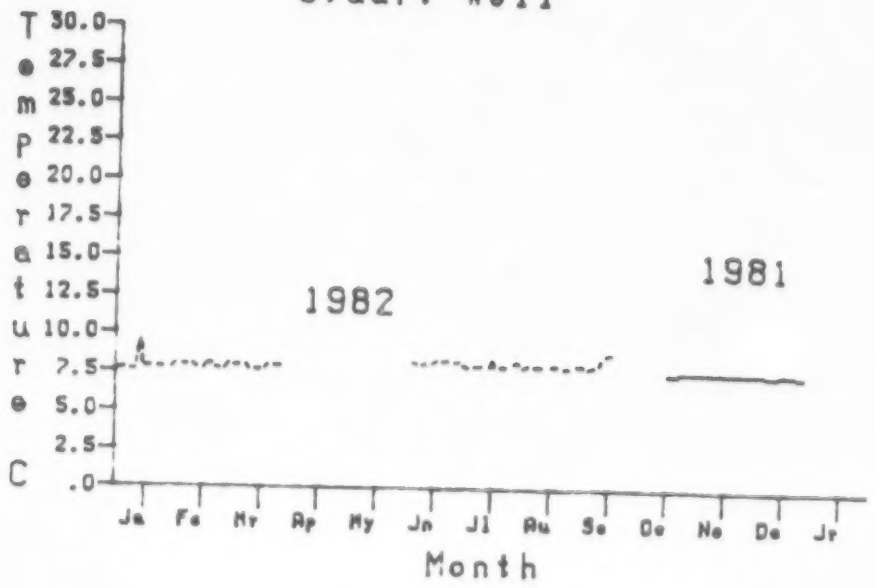
STAVE RIVER 1981

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	5.6	6.7	6.26	12
FEBRUARY	4.7	6.5	5.72	28
MARCH	6	8.7	7.31	31
APRIL	7.5	7.9	7.7	1
MAY	8.5	13.5	11.3	21
JUNE	11.6	14.1	12.53	29
JULY	12.3	17.5	15.75	7
AUGUST	16.5	17.8	16.87	7
SEPTEMBER	14.5	18.3	17.13	21
OCTOBER	10	14.3	11.5	31
NOVEMBER	7.4	10.5	9.19	30
DECEMBER	5.6	7.4	6.46	31

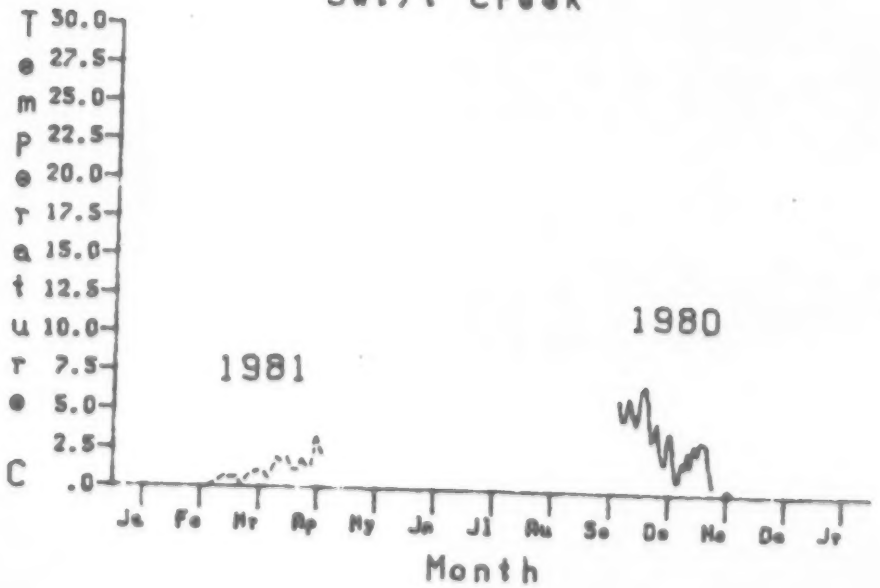
STAVE RIVER 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	3.2	5.5	3.69	31
FEBRUARY	3.7	4.5	4.01	28
MARCH	4.5	5	4.74	11
APRIL	NO DATA			
MAY	NO DATA			
JUNE	NO DATA			
JULY	NO DATA			
AUGUST	NO DATA			
SEPTEMBER	NO DATA			
OCTOBER	NO DATA			
NOVEMBER	NO DATA			
DECEMBER	NO DATA			

Stuart Well



Swift Creek



STUART WELL 1981

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER	7.5	7.75	7.63	12
NOVEMBER	7.75	7.75	7.75	30
DECEMBER	7.5	7.75	7.65	31

STUART WELL 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	7.5	10.75	7.76	31
FEBRUARY	7.75	8	7.88	28
MARCH	7.75	8	7.91	28
APRIL		NO DATA		
MAY		NO DATA		
JUNE	8	8.5	8.26	23
JULY	8	8.25	8.06	31
AUGUST	8	8.5	8.11	31
SEPTEMBER	7.75	9	8.37	20
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

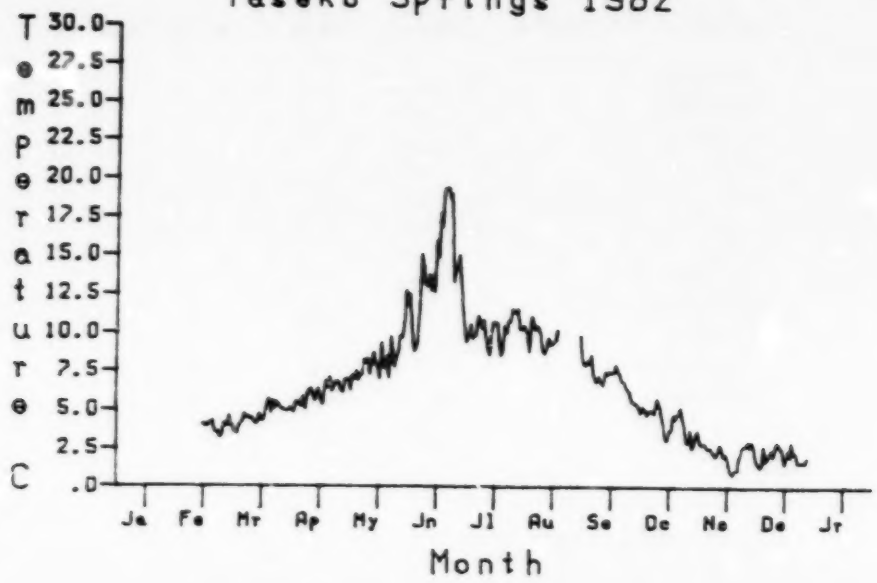
SWIFT CREEK 1980

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER	4	6.4	5.34	8
OCTOBER	.1	7.5	3.47	31
NOVEMBER	-.5	3.7	.88	30
DECEMBER	-.3	.3	-.04	4

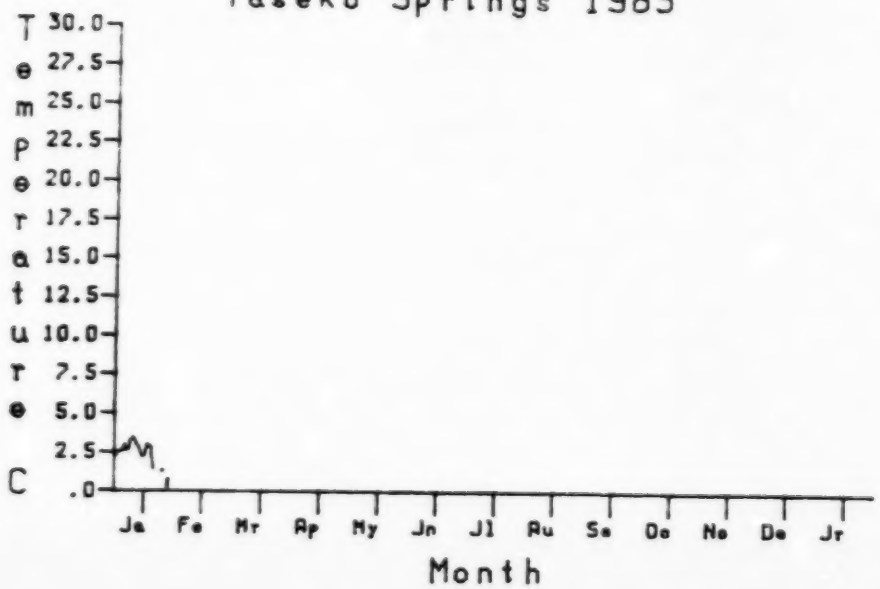
SWIFT CREEK 1981

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY	0	1.2	.43	12
MARCH	0	3.1	.98	31
APRIL	.2	4.6	1.62	17
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

Taseko Springs 1982



Taseko Springs 1983



TASEKO SPRINGS 1982

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY	2.75	4.5	3.8	14
MARCH	2.75	7	4.56	31
APRIL	3.85	9.25	5.9	30
MAY	5	13.25	7.94	31
JUNE	6	30	14.13	30
JULY	7.75	17	10.35	31
AUGUST	7	14	9.88	21
SEPTEMBER	4	11	7.29	29
OCTOBER	1.5	7	4.47	31
NOVEMBER	.5	4	2.33	30
DECEMBER	1	3.25	2.15	31

TASEKO SPRINGS 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY	0	4	2.38	25
FEBRUARY		NO DATA		
MARCH		NO DATA		
APRIL		NO DATA		
MAY		NO DATA		
JUNE		NO DATA		
JULY		NO DATA		
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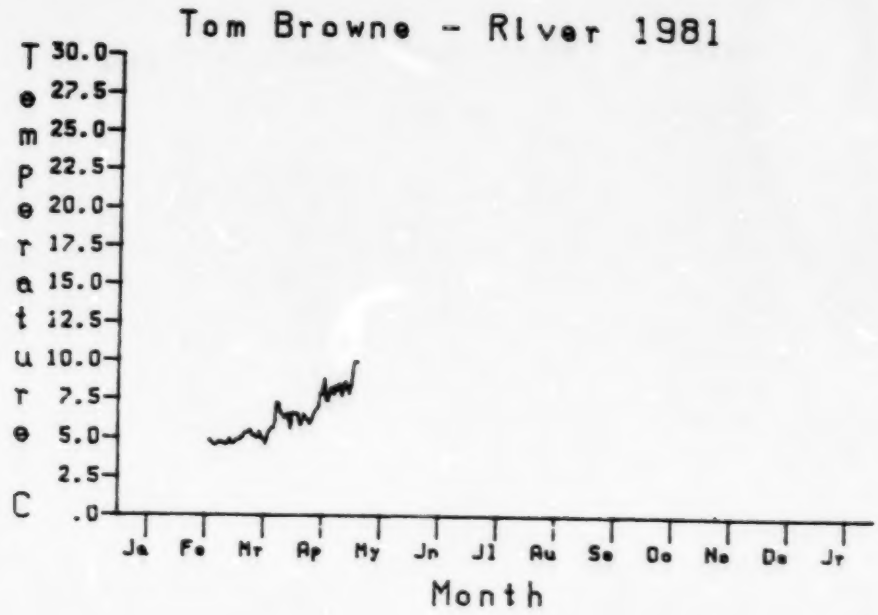
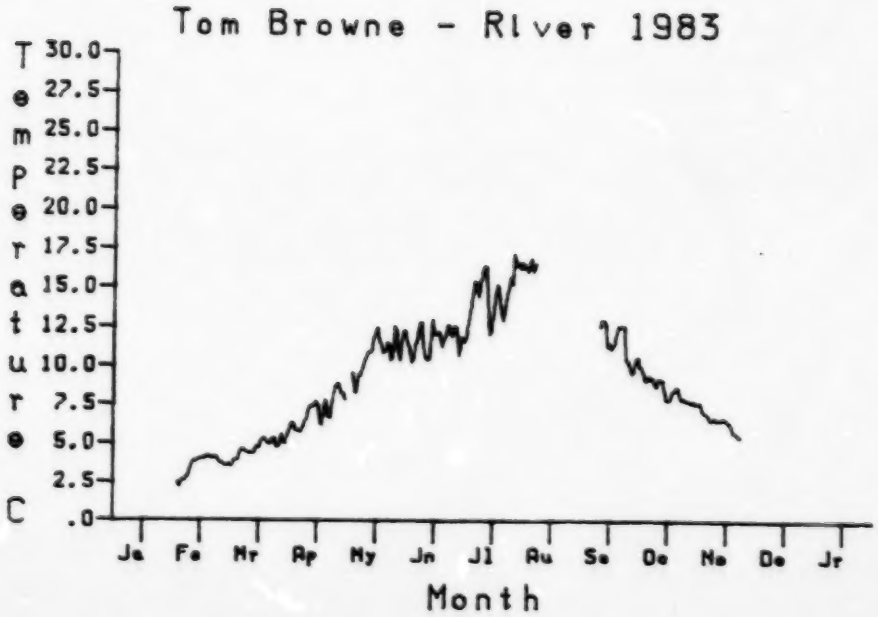

Tom Browne - River 1981
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month


Tom Browne - River 1983
Temperature C
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
.0
Ja Fe Mr Ap My Jn Jl Au Se Oc No De Jr
Month

TOM BROWNE - RIVER 1981

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY	4.4	5.4	4.64	12
MARCH	2.7	8.2	5.48	31
APRIL	4.8	9.5	7.15	30
MAY	7.5	10.5	8.98	6
JUNE		NO DATA		
JULY		NO DATA		
AUGUST		NO DATA		
SEPTEMBER		NO DATA		
OCTOBER		NO DATA		
NOVEMBER		NO DATA		
DECEMBER		NO DATA		

TOM BROWNE - RIVER 1983

MONTH	MIN.C	MAX.C	MEAN.C	# OF DAYS
JANUARY		NO DATA		
FEBRUARY	1.8	4.4	3.53	26
MARCH	3	6.2	4.58	31
APRIL	4.8	10.1	6.89	30
MAY	7.2	14.8	10.54	28
JUNE	9.7	14	11.79	30
JULY	10.4	18.8	14.18	31
AUGUST	14.4	18.4	16.43	10
SEPTEMBER	8.2	14	11.7	18
OCTOBER	7.3	11.5	8.77	31
NOVEMBER	5.2	8	6.58	26
DECEMBER		NO DATA		

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